



# Board of Directors Meeting

July 23, 2024

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:** JULY 23, 2024

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

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

### AGENDA

1. **CALL TO ORDER**
2. **AGENDA APPROVAL**
3. **MINUTES OF PREVIOUS BOARD MEETING ON JUNE 25, 2024**
4. **RECOGNITION**
5. **EXECUTIVE DIRECTOR'S REPORT**
6. **ITEMS FROM THE PUBLIC**  
*Matters Not Listed for Public Hearing on the Agenda*
7. **RESPONSES TO PUBLIC COMMENTS**
8. **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 the Updated Purchasing Manual*
  - h. *Approval of Engineering Services – Rivanna Pump Station Reconstruction – Short Elliot Hendrickson Engineers*
  - i. *Approval of Betterment Agreement with City of Charlottesville Utilities Department – Emmet Streetscape Water Line*

- j. *Approval to Amend Professional Engineering Services Work Authorization – Observatory & South Rivanna Water Treatment Plants, Rehabilitation and Expansion Project – Short Elliot Hendrickson Engineers*
- k. *Approval of Additional Engineering Services – Moores Creek Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades – Hazen and Sawyer Engineering*

**9. OTHER BUSINESS**

*(Joint Session with the RSWA)*

- a. *Presentation: Strategic Plan Update  
Betsy Nemeth, Director of Administration and Communications*
- b. *Presentation: Human Resources Update  
Leah Beard, Human Resources Manager*
- c. *Presentation and Consider Vote to Approve: Amended and Restated By-Laws  
Lonnie Wood, Director of Finance and Information Technology*

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

**11. CLOSED MEETING - SECURITY UPDATE and PERSONNEL REVIEW**

*(Motion, second and roll call vote to enter into a joint closed session to discuss confidential information related to cybersecurity and the security of the authorities' physical premises as permitted by the public safety exemptions at Section 2.2-3711-A(19) of the Code of Virginia and confidential performance evaluations, goals and objectives of specific personnel as permitted by the personnel exemption at Section 2.2-3711-A(1) of the Code of Virginia).*

*Motion\*: I move that the Rivanna Water & Sewer Authority enter into a joint closed session with the Rivanna Solid Waste Authority to discuss confidential information related to cybersecurity and the security of the authorities' physical premises as permitted by the public safety exemptions at Section 2.2-3711-A(19) of the Code of Virginia, and confidential performance evaluations, goals and objectives of specific personnel as permitted by the personnel exemption at Section 2.2-3711-A(1) of the Code of Virginia.*

*(Motion, second and roll call vote to certify the closed session)*

*Motion\*: The Rivanna Water and Sewer Authority hereby certifies by recorded vote that, to the best of each member's knowledge, only public business matters lawfully exempted from the open meeting requirements of the Virginia Freedom of Information Act and identified in the motion authorizing the closed meeting were heard, discussed or considered in the closed meeting to which this certification resolution applies.*

*\* Closed meeting motion subject to change\**

*(Complete and close the RWSA meeting, then complete and close the RSWA meeting)*

**12. 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**  
**June 25, 2024**

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, June 25, 2024 at 2:15 p.m. at Rivanna Administrative Building, (2nd Floor Conference Room), 695 Moores Creek Lane, Charlottesville, VA 22902.

**Board Members Present:** Mike Gaffney, Lauren Hildebrand, Quin Lunsford as alternate for Gary O’Connell, Ann Mallek, Brian Pinkston, Samuel Sanders

**Board Members Absent:** Gary O’Connell, Jeff Richardson

**Rivanna Staff Present:** Bill Mawyer, Lonnie Wood, Jennifer Whitaker, David Tungate, Jacob Woodson, Deborah Anama, Bethany Houchens, Betsy Nemeth, Victoria Fort

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

**1. CALL TO ORDER**

Mr. Gaffney called the June 25, 2024, regular meeting of the Rivanna Water and Sewer Authority to order at 2:15 p.m.

**2. AGENDA APPROVAL**

Mr. Mawyer noted that there was a proposed amended agenda to add items under 8(f) and 8(i) about Drought Monitoring. He stated that although it would be on the Consent Agenda for approval, he would address the matter during the meeting.

**Mr. Pinkston moved that the Board approve the Agenda as amended. The motion was seconded by Ms. Mallek and passed unanimously (5-0). (Mr. O’Connell and Mr. Richardson were absent.)**

**3. MINUTES OF PREVIOUS BOARD MEETING ON MAY 28, 2024**

**Mr. Sanders moved that the Board approve the minutes of the May 28, 2024 meeting. The motion was seconded by Ms. Mallek and passed unanimously (5-0). (Mr. O’Connell and Mr. Richardson were absent.)**

Mr. Pinkston stated that he wished to disclose information for the public record. He stated that his adult daughter, Florence Pinkston, held a paid intern position at the Rivanna Water and Sewer Authority. He explained that she did not reside with him in his household and was not considered an immediate family member according to Virginia State and Local Government Conflicts of Interest Act definitions.

Mr. Pinkston stated that moreover, the actions taken that day did not grant any benefits for him

47 or other immediate family members as defined by the act. He stated that therefore, he believed  
48 there was no conflict of interest under the Virginia State and Local Government Conflict of  
49 Interest Act. He stated that to exercise caution, he disclosed his daughter's appointment at the  
50 Authority and confirmed that he could participate in this meeting fairly and objectively in the  
51 public interest. He stated that he had consulted with the Commonwealth's Attorney regarding this  
52 matter.

53  
54 Statement by Mr. Pinkston:

- 55
- 56 • *I wish to make a disclosure to be recorded in the public record.*
  - 57 • *My adult daughter, Florence Pinkston, is currently serving as a paid intern at the*  
58 *Rivanna Water and Sewer Authority.*
  - 59 • *While she is my daughter, she does not live with me in my household, meaning she is not*  
60 *an immediate family member as that term is defined by the Virginia State and Local Government*  
61 *Conflict of Interests Act.*
  - 62 • *Furthermore, none of our actions today involve an issue or transaction that would*  
63 *provide any benefit to me or any other immediate family member of mine, as that term is defined.*
  - 64 • *Therefore, it is my understanding that I do not have a conflict of interest under the*  
65 *Virginia State and Local Government Conflict of Interests Act, but, out of an abundance of*  
66 *caution, I nevertheless wish to disclose my daughter's employment at the Authority, and state*  
67 *that I am able to participate in this meeting fairly, objectively, and in the public interest.*
- 68

#### 69 **4. RECOGNITION**

70 There were no recognitions.

#### 71 72 **5. EXECUTIVE DIRECTOR'S REPORT**

73 Mr. Mawyer stated that he was pleased to have Florence with Rivanna, along with the other  
74 interns. He stated that staff would bring the interns to the Board meeting next month and  
75 introduce them before their internship was completed, as next month would be their final month.  
76 He stated that after six good months focusing on budget matters, it was a pleasure to discuss  
77 other topics. He stated that the state recently issued a new statewide drought map, which came  
78 out yesterday. He stated that this led to the amended agenda item, which he would address  
79 shortly. He stated that before moving on to those items, he wanted to celebrate employee  
80 development.

81  
82 Mr. Mawyer stated that two employees had obtained their commercial driver's license: David  
83 Heintges and Garrett Carver. He stated that the CDL was a state license that allowed them to  
84 drive large vehicles such as trucks and tractors on public highways. He stated that they were also  
85 ready to celebrate the beginning of a new era in construction. He stated that over the years, he  
86 had discussed numerous major CIP construction projects aimed at supporting the community's  
87 water supply plan as well as facilities at Moores Creek.

88  
89 Mr. Mawyer stated that it was exciting that they now had eight projects ready for construction  
90 bidding over the next six months, totaling approximately \$155 million. He stated that these  
91 projects included piping from the Ragged Mountain Reservoir to the Observatory Treatment

92 Plant, a new pump station off Reservoir Road, and the Central Water Line project which was  
93 approved by the Board in 2022. He mentioned that there were other significant projects at Crozet  
94 Pump Stations and building upfits at Moores Creek.

95  
96 Mr. Mawyer stated that the team was enthusiastic about these developments. He noted that they  
97 had five additional major projects the following next year and two in the 3<sup>rd</sup> year. He stated that  
98 the \$370 million CIP is about to get started. He explained that a major factor driving these  
99 projects was to increase the community's water supply.

100  
101 Mr. Mawyer stated that one of the upcoming projects involved the Central Water Line. He stated  
102 that in 2022 the Board approved extending the route from the Observatory Water Treatment  
103 Plant along Cleveland Avenue, Cherry Avenue, and Elliott Avenue to East High Street. He stated  
104 that initially, they planned to collaborate with the City Utilities Department on a water line  
105 project in E. High Street to minimize costs and traffic impact.

106  
107 Mr. Mawyer stated that, however, after further investigation, they decided that instead of going  
108 along 11th Street to East High Street, the new alignment would include Little High Street, Meade  
109 Avenue, and Fairway Avenue before crossing City property near the Rivanna River to connect  
110 near E. High St.

111  
112 Ms. Mallek asked if it was customary to put lines like this in the floodplain.

113  
114 Mr. Mawyer stated that it was not their first choice; however, they were attempting to move as  
115 far away from the river as possible. He stated that nevertheless, they had other sewer lines  
116 located in the floodplain, which was not uncommon.

117  
118 Mr. Mawyer stated that they did a lot of community outreach recently. Mrs. Whitaker, their  
119 Director of Engineering and Maintenance, had spoken at several community events. He stated  
120 that she spoke at the Places 29 Hydraulic Community Advisory Committee, and she spoke to the  
121 Rotary Club. He stated that furthermore, she also represented and participated at the Regional  
122 Thomas Jefferson Planning District Commission as they were updating the Regional Hazard  
123 Mitigation Plan. He expressed appreciation for her support in providing those communications to  
124 the community.

125  
126 Mr. Mawyer stated that he would now discuss drought conditions in the area. He explained that  
127 the urban water system gets a small volume of water from the North Rivanna Water Treatment  
128 Plant via the North Rivanna River, with most of its water from the South Rivanna Reservoir  
129 through the Water Treatment Plant, and further from the Ragged Mountain Reservoir to the  
130 Observatory Treatment Plant. He stated that these three plants serve the urban water system. He  
131 stated they typically get 8 to 10 million gallons per day (MGD) from the South Rivanna  
132 Reservoir and 1 to 2 MGD from the Ragged Mountain Reservoir, and a small amount from the  
133 North Fork River.

134  
135 Mr. Mawyer informed the Board that they were building a new pipe over the next six or seven  
136 years that will take water from the South Rivanna Reservoir to fill Ragged Mountain Reservoir,  
137 so they would not be taking water directly from Sugar Hollow to fill Ragged Mountain in the

138 future. He stated that Totier Creek Reservoir and Water Treatment Plant served Scottsville,  
139 while Beaver Creek Reservoir and Water Treatment Plant served Crozet. He emphasized that the  
140 reservoir monitored most closely is the South Rivanna Reservoir. He stated that the image  
141 provided showed the face of the dam on June 25 at the South Rivanna Reservoir, with only a  
142 slight trickle coming across the top of the reservoir.

143  
144 Mr. Mawyer stated that if the South Rivanna Reservoir overflowed, they maximized use of the  
145 water in the South Rivanna Reservoir through the South Rivanna Water Treatment Plant,  
146 processing 8 to 10 million gallons per day from South Rivanna and only 1 or 2 MGD from  
147 Observatory. He stated that when South Rivanna stopped overflowing, they let the water level  
148 decline to about a foot down below the top of the dam then they switched operating production  
149 to maximize use of water in the Ragged Mtn Reservoir and the Observatory Treatment Plant at a  
150 level of 4 to 5 million gallons per day. He stated that they still needed water from the Rivanna  
151 Reservoir because until they completed the pipeline from Ragged Mountain to Observatory and  
152 the pipeline from Observatory to Free Bridge, they could not get the 10 million gallons a day  
153 solely out of the Observatory WTP to meet community demand.

154  
155 Mr. Mawyer stated that when they experienced drought problems in 2017, it was due to South  
156 Rivanna Reservoir's rapid decline. He stated that Ms. Mallek had informed him that she crossed  
157 one of the bridges and noticed how low the reservoir was. He stated that they closely monitored  
158 such situations. He stated that recently, they had been discussing what is called a flash drought.  
159 He stated that this occurs with extreme temperatures and low rainfall, as described by NOAA.  
160 He stated that literature suggests that flash droughts start and intensify quickly, dissipating over  
161 periods of weeks and months in contrast to conventional droughts that can last for years.

162  
163 Mr. Mawyer mentioned that the 2002 drought lasted approximately 18 months. He stated that  
164 however, on June 22, an updated map by the State Drought Monitoring Committee was released,  
165 placing most of the state in a drought "watch" category with a warning for the northern and  
166 western parts of the state.

167  
168 Mr. Mawyer stated that their area had a drought watch with normal groundwater, precipitation,  
169 and reservoir levels but a warning regarding stream flows. He stated that consequently, they  
170 reviewed the Drought Management Plan that morning with concern over this new state  
171 information. He stated that staff came up with a recommendation for the Board, included in the  
172 Consent Agenda, which was based on the Drought Monitoring Task Force designation of their  
173 area as in a drought watch, along with the fact that the whole state is experiencing flash drought  
174 conditions due to extreme temperatures and low precipitation with no precipitation forecasted.

175  
176 Mr. Mawyer stated that staff recommended officially declaring a drought watch, which involves  
177 voluntary measures to inform people that a potential drought may occur in the future, and they  
178 should conserve water where possible. He stated that localities were not asked to implement any  
179 water conservation measures at this stage; that occurs during the next stage, known as a warning.  
180 He stated that at that point, he would send letters to the City and the County requesting them to  
181 enforce their water conservation ordinances.

182  
183 Mr. Mawyer stated that hopefully, they would not reach that stage, but streams were dropping,



184 and reservoir levels were decreasing. He stated that currently, they had five reservoirs, three of  
185 which were not spilling. He stated that South Rivanna is almost not spilling, while Totier Creek  
186 in Scottsville is in the same barely spilling category. He stated that soon, if there is no rain, all  
187 five reservoirs will not be spilling. He stated that despite these concerns, he had good news: their  
188 three urban reservoirs, Ragged Mountain, Sugar Hollow, and South Rivanna, were 98% full. He  
189 stated that South Rivanna was crucial to the situation, as it could drop quickly like in 2017,  
190 causing great concern.

191  
192 Mr. Mawyer stated that he recommended that the Board declare a drought watch and issue a  
193 public appeal for water conservation efforts. He stated that staff also asked for authorization to  
194 move forward with a drought warning, or a drought emergency should those conditions reach the  
195 levels before the Board was set to meet again in July. He stated that last year, during the time  
196 South Rivanna reservoir stopped overflowing, within 13 days it had decreased by a foot. He  
197 explained that due to the geometry of reservoirs, water volume decreases more quickly as the  
198 water level declines. He stated that this referred to stage storage curves, which show how much  
199 volume of water is present at various elevations.

200  
201 Mr. Mawyer stated that his goal was to be proactive and position the community to conserve  
202 water and authorize further action if necessary due to sudden drops in stream and reservoir  
203 levels. He explained that the Moormans River flows from Sugar Hollow into South Rivanna,  
204 with about 8 million gallons a day coming down the river currently. He stated that in contrast,  
205 during the major drought of 2002, only 1 million gallons flowed through the river. He stated that  
206 in 1995, there was a high recorded flow of around 150-200 million gallons during rainfall.

207  
208 Mr. Mawyer noted that they were now near the bottom of the flow range. He stated that 1 million  
209 gallons per day was considered a severe drought, while 8 million is their current situation. He  
210 explained that about 8 million gallons theoretically came into South Rivanna Reservoir daily,  
211 and the community used approximately 12.6 million gallons yesterday. He stated that although  
212 there was not a direct correlation between community usage and reservoir levels, it served as a  
213 general indicator. He stated that with hot weather causing increased lawn watering and water-use  
214 activities, this was their peak water usage period.

215  
216 Mr. Pinkston asked if Mr. Mawyer would inform the media or the City of the drought watch  
217 status.

218  
219 Mr. Mawyer stated that they would inform the City, County, ACSA and the media of the drought  
220 watch declaration.

221  
222 Mr. Pinkston asked what the next steps would be if the situation worsened.

223  
224 Mr. Mawyer stated that a regional drought response and contingency plan was developed over a  
225 decade ago. He stated that it included criteria to assess their water supplies and reservoir levels.  
226 He explained that a consultant runs a model based on historical precipitation data from the last  
227 100 years, predicting rainfall amounts for the next few months and estimating reservoir levels.

228  
229 Mr. Mawyer stated that they would ask this consultant to run the model for them. He stated that

230 the drought monitoring committee includes City, County, ACSA, and RWSA, and upon  
231 activating the committee, they will initiate discussions. He stated that when the Drought  
232 Response Plan's criteria are met or in their judgment necessitated a drought warning, they will  
233 send letters to the City and County requesting water conservation ordinance activation. He stated  
234 that this process would include additional press updates.

235  
236 Ms. Hildebrand stated that they would write a memo to Council, authorizing enforcement of  
237 what was stated in the code. She stated that this process had specific procedures to follow.

238  
239 Ms. Mallek stated that it may require a special meeting.

240  
241 Mr. Mawyer stated that in 2017, they had a special meeting of this Board, which was the only  
242 time during his tenure. He stated that he did not want to have another one if he could avoid it. He  
243 stated that this was why he wanted to add the reservoir issue to today's agenda for their  
244 consideration. He stated that it is currently part of the consent agenda; however, they can pull it  
245 for a separate vote if desired. He stated that when acting on the consent agenda, this item will be  
246 approved.

247  
248 Ms. Mallek stated that she was grateful for addressing the issue since it was her top priority. She  
249 stated that people could easily overlook this concern. She stated that the area of focus was in the  
250 northwest part of the County where she resided. She stated that they were on the eastern slope  
251 and experienced similar dry conditions as those in the northern valley. She stated that streams  
252 had run dry, with no water supply.

253  
254 Ms. Mallek stated that after conducting her calculations, they were six inches below their  
255 expected precipitation for the first half of 2024, in addition to being six inches below their target  
256 at the end of 2023. She stated that the only reason they were not in an even more critical situation  
257 was due to almost seven inches of rainfall in January. She stated that without that storm, they  
258 would be 12 inches beneath their goal. She acknowledged that this situation was indeed very  
259 serious.

260  
261 Ms. Mallek stated she could not help but become frustrated when she saw people watering their  
262 lawns during such a crucial time. She stated that everyone with a well knew their grass had long  
263 since disappeared, replaced by dust and dry turf. She expressed her gratitude for seeking pre-  
264 authorization for this matter and urged not to delay in taking action. She stated she recalled back  
265 to 2003 when they were nine days away from sending the university home due to the reservoir  
266 losing two to three feet a day after the students returned in August.

267  
268 Ms. Mallek stated that it took weeks and months for the general public to comprehend that this  
269 was real, so she implored staff to start preparing early. She stated that she had attended every  
270 Board meeting regarding this issue over the past several months and had kept track of it, and  
271 would certainly do their part on the radio. She stated that however, they must find a way to  
272 capture people's attention. She stated urban water may be well-suited since all that water comes  
273 from rural areas, which are interconnected with surface waters.

274  
275 Ms. Mallek stated that when there is rain, much of the initial loss goes towards rehydrating

276 stream beds and other areas. She stated that not everything will reach South Rivanna when it  
277 rains if they were lucky enough for the first one to be soft and gentle, softening the ground  
278 enough so that water may sink in. She stated she had been having nightmares about this situation  
279 at her house and wanted to share these concerns with all of them so that everyone took it  
280 seriously as well.

281  
282 Mr. Mawyer stated that water main flushing was a normal and appropriate water system  
283 management technique for both the ACSA and the City. He stated that even during water  
284 conservation times the water gets warmer, which causes bacteria in the pipes to grow faster and  
285 consume chlorine quicker.

286  
287 Mr. Mawyer stated that it makes it more difficult towards the end of their distribution systems to  
288 maintain appropriate water quality. He stated that one of the best solutions is to open fire  
289 hydrants and flush the system to get freshwater in. He stated that people may be confused about  
290 releasing water during a water conservation period, but it served as an appropriate tool that must  
291 be used.

292  
293 Mr. Pinkston asked if the item before the Board was a revised and amended drought management  
294 report that was included in the consent agenda along with the request for Board action to declare  
295 the drought watch.

296  
297 Mr. Mawyer confirmed that was correct.

## 298 299 **6. ITEMS FROM THE PUBLIC**

300  
301 Dede Smith stated that she had a few points regarding the director's report. She stated that  
302 regarding the changes to the Central Water Line, she was unhappy with the Board's decision to  
303 go through residential areas of the City. She noted that Mr. Sanders and his predecessor were  
304 eager to do this along with Mr. Pinkston. She stated that they had quickly called for a motion to  
305 take it through the City, which she thought was inappropriate.

306  
307 Ms. Smith pointed out the winding nature of the route shown in the picture was an unsuitable  
308 factor, and now the route had been changed again, going through more residential  
309 neighborhoods. She stated that her question for the Board was about the outreach taken to those  
310 new neighborhoods. She stated that she wanted to know if they were aware of what's coming  
311 their way. She emphasized that this was a significant issue for City residents.

312  
313 Ms. Smith stated that her second point concerned the comments about water flow. She stated that  
314 she agreed with declaring a drought watch, but she pointed out that only the Moormans River  
315 was mentioned as a contributor to the Rivanna. She stated that she did not hear any mention of  
316 the flow in the Mechums River. She explained that the average flow in the Moormans was about  
317 10 million gallons in a normal area, and it was 100 to 200 million gallons in the Rivanna. She  
318 stated that she did not understand that, as the urban was way downstream of that.

319  
320 Ms. Smith stated that she had sympathy for Ms. Mallek and the other well-users in the northwest  
321 part of the County. She noted that their situation was much higher up in the watershed, and while

322 it might be a Rivanna issue, it was not necessarily relevant to the urban system. She stated that  
323 her third point was regarding the purpose of keeping the South Fork Rivanna Reservoir if it did  
324 not help during droughts for more than a certain number of days. She asked what this specific  
325 number of days was and how long it took them to face issues during dry periods.

326  
327 **7. RESPONSES TO PUBLIC COMMENT**

328  
329 Mr. Mawyer stated that thus far, they have not discussed the change in the Central Water Line  
330 route with the neighborhoods along Little High Street. He stated that they will do so shortly. He  
331 stated that they are still conducting engineering and subsurface investigations to confirm that this  
332 will be the final route. He stated that after they put the project out for bids and secured a  
333 contractor, they will communicate with all of the neighborhoods along the entire route from  
334 Observatory WTP to Free Bridge. When they have the contractor who will complete the work,  
335 they can better answer any questions neighbors may have about when work will occur in their  
336 area.

337  
338 Mr. Mawyer stated that once they have a contractor under contract, they will provide updated  
339 information to all the neighborhoods they previously spoke with, including Fry's Spring, and  
340 meet with them to discuss the project's details. He stated that they initially talked to these  
341 communities a few years ago, and it has taken them this long to prepare for bidding. He stated  
342 that construction is expected to begin next year. He stated that when they have a contractor on  
343 board, they will reach out to those residents again.

344  
345 Bethany Houchens stated that the Mechums, Moormans, North Fork, and South Rivanna rivers  
346 were in the 25th percentile regarding flow condition, indicating a low flow situation currently  
347 being experienced. She stated that the rolling average for the Mechums River over the last seven  
348 days was 9.6 million gallons per day. She stated that for the Moormans, it was 6.5 million  
349 gallons a day; for the North Fork, it had 10.3 million gallons daily; and South Rivanna recorded  
350 16.8 million gallons in the past seven days.

351  
352 Mr. Mawyer stated that they may have misled Ms. Smith regarding the use of South Rivanna  
353 reservoir. He explained that they still depend on the South Rivanna Reservoir as their primary  
354 water supply source for the urban area. He stated that even after implementing an optimization  
355 strategy utilizing more water from the Ragged Mountain reservoir, they continue to withdraw 5  
356 to 7 million gallons per day from South Rivanna reservoir as the primary water supply, an  
357 amount greater than what they would withdraw from Ragged Mountain reservoir. He stated that  
358 under normal circumstances, most of the water for the urban area comes from the South Rivanna  
359 reservoir.

360  
361 **8. CONSENT AGENDA**

362  
363 *a. Staff Report on Finance*

364  
365 *b. Staff Report on Operations*

366

- 367 c. *Staff Report on CIP Projects*
- 368
- 369 d. *Staff Report on Administration and Communications*
- 370
- 371 e. *Staff Report on Wholesale Metering*
- 372
- 373 f. *Staff Report on Drought Monitoring – Amended*
- 374
- 375 g. *Approval of FY24-28 and FY 25-29 Capital Improvement Plan Amendment – Rivanna*
- 376 *Pump Station Restoration*
- 377
- 378 h. *Approval to Amend Professional Engineering Services Work Authorization – Central*
- 379 *Water Line Project – Michael Baker International*
- 380
- 381 i. *Request for Authorization to Declare a Drought Watch, Warning, or Emergency*

382  
383 Mr. Gaffney stated that the Board would pull Items (f) and (i) for discussion. He asked if there  
384 were any other items Board members would like to address.

385  
386 Ms. Mallek requested to pull Item (c) from the Consent Agenda. She stated that regarding  
387 number 14 found on page 40, she would like to know more about the definition of "current  
388 status" as it pertained to the Schenks Branch.

389  
390 Mr. Mawyer stated that they had been working with County staff regarding the easement across  
391 County property for the Schenks Branch wastewater pipeline. He stated that they needed to  
392 schedule another meeting with them, which was on their agenda. He stated that Ms. Hildebrand  
393 mentioned that the City was interested in moving forward with its section of the project. He  
394 stated that it had been a long-standing project, and they would bring their team back together  
395 with the County to discuss potential solutions.

396  
397 Ms. Mallek stated that she thought the issue had been resolved several years ago.

398  
399 Mr. Mawyer stated that he provided the data to County staff, but he had not been informed that  
400 they had finalized it with the Board of Supervisors. He stated that he believed they had a  
401 proposed route, an easement drafted, and all necessary paperwork prepared. He stated that they  
402 just needed consensus on these matters.

403  
404 **Mr. Pinkston moved that the Board approve the Consent Agenda. Ms. Mallek seconded the**  
405 **motion, which passed unanimously (5-0). (Mr. O’Connell and Mr. Richardson were**  
406 **absent.)**

407  
408 **9. OTHER BUSINESS**

- 409
- 410 a. *Presentation: Sugar Hollow Reservoir Gate Restoration Update*
- 411 *Victoria Fort, P.E., Senior Civil Engineer*

412 Victoria Fort, Senior Civil Engineer, stated that she would give a short report about the present  
413 situation concerning the Sugar Hollow Dam Rubber Crest Gate and the progress of alarm system  
414 implementation. She stated that she would provide an overview of what the rubber crest gate is  
415 and discuss its history and functioning. She stated that she would also talk about the incident on  
416 January 17, 2024, the post-event actions taken by the staff, and then delve into the siren system  
417 discussion and any questions.

418  
419 Ms. Fort stated that the Sugar Hollow Dam has a five-foot tall inflatable rubber crest gate, which  
420 they also call a rubber bladder. She stated that it is an air-filled five-foot-tall gate that helps  
421 control the water level in the reservoir. She stated that in the provided picture, one can see the  
422 five-foot-tall rubber gate and the concrete section of the dam. She stated that the rubber gate is  
423 mounted on this concrete section. She stated that in the photo, the water level is about five feet  
424 down from what they consider normal pool, which is the top of the gate.

425  
426 Ms. Fort stated that the original bladder was installed in 1999 after removing the original crest  
427 gates, which were a series of eight metal gates across the top of the dam that were manually  
428 operated. She stated that these metal gates were damaged in a 1995 storm and replaced with the  
429 rubber bladder gate system. She stated that in 2021, this rubber bladder system was replaced with  
430 an in-kind system, which is essentially the same as the initial installation in 1999. She stated that  
431 this new system impounds about 69 million of the 367 million gallons of water stored in the  
432 reservoir, or just under 20%.

433  
434 She explained that the crest gate operates via automated controls on site and is monitored  
435 remotely 24/7 by their staff.

436  
437 Ms. Fort stated that on January 17 of this year, around 7:00 a.m., the gate malfunctioned and  
438 began to rapidly deflate and release approximately 70 million gallons of water downstream in  
439 just under an hour.

440  
441 She stated that staff arrived on site about the same time that emergency services did, around 8:25  
442 a.m., to determine the cause of the issue, attempt to get it back online, and to assess if there were  
443 any remaining hazards to the public. She stated that staff quickly determined that the cause was  
444 an air coupling on the airline that supplies the bladder that had become detached, likely due to  
445 very cold temperatures overnight.

446  
447 Ms. Fort stated that repairs were made within a few minutes and the bladder was put back in  
448 operation by about 9:00 a.m. She indicated that the picture on the right shows the bladder during  
449 the event. She stated that there is a camera trained on the bladder at all times, so they were able  
450 to see footage from the event. She noted that there was snow on the ground due to a few inches  
451 of snow in the days preceding and overnight temperatures down in the teens. She stated that they  
452 believe this was a contributing factor.

453  
454 Ms. Fort stated that in the days and months that followed, staff made significant efforts to  
455 understand the event and take measures to prevent its recurrence. She stated that they first  
456 documented everything that took place during the event and put all this information into an  
457 After-Action Report. She stated that this information gathering including obtaining photos of the

458 area downstream, drone surveillance footage, a physical recon of the area downstream, logs of  
459 internal and external communications, and communication with emergency services and  
460 members of the public. She stated that all of this information is in the report completed in April.  
461

462 Ms. Fort stated that they also made numerous improvements to the mechanical systems, which  
463 are ongoing. She stated that immediately after the event, they made the repair. She stated that the  
464 air coupling that came apart can be seen on the right of the slide; this is the air inflation line with  
465 pressure fittings and pipe clamps. She stated that they added additional pipe supports and clamps  
466 to keep these fittings in place as a preventative measure.  
467

468 Ms. Fort stated that their engineering consultant inspected the system on February 2 to determine  
469 whether it was safe for continued operation, which they confirmed it was. She stated that they  
470 provided recommended modifications that could be made to the air piping to add security and  
471 resiliency to the system. She stated that they are in the design phase for those modifications,  
472 which they expect to complete in the fall of this year.  
473

474 Ms. Fort stated that the change involves replacing couplings with a flanged system instead of  
475 pressure couplings. She stated that regarding the bladder decommissioning, members of the  
476 public inquired about whether it could be removed for months of the year or permanently. She  
477 stated that however, due to storage contribution concerns, they were not yet comfortable risking  
478 a reduction in the water supply. She stated that they will complete the South Rivanna to Ragged  
479 Mountain Pipe over the next several years, providing another opportunity to revisit the issue.  
480 She stated that they would also reassess the necessity of keeping the bladder in operation year-  
481 round or permanently when the bladder reached the end of its service life around 2040.  
482

483 Ms. Fort stated that they have replaced the camera for improved nighttime visibility and  
484 surveillance. She stated that they have reviewed existing SCADA alarms, enabled additional  
485 alarms, and set up text alerts for staff if certain bladder-related alarms were triggered. She stated  
486 that lastly, they were working on installing a tailwater sensor to monitor downstream conditions  
487 at the dam. She stated that they hoped to get the tailwater sensor installed sometime this fall.  
488

489 Ms. Fort stated that they had done a lot of work with emergency response and public notification.  
490 She stated that they had meetings with the Charlottesville/University/Albemarle Emergency  
491 Communications Center, Albemarle County Fire Rescue staff, and with the National Weather  
492 Service to understand what transpired during the event from the viewpoint of emergency  
493 responses. She stated that they also discussed regional capabilities and those of the National  
494 Weather Service to notify the public in an emergency like this or a more catastrophic event in the  
495 future.  
496

497 Ms. Fort noted that they have a tabletop exercise planned for October, which would include  
498 emergency services, local administrators, their regulators through the state Department of  
499 Conservation and Recreation, internal staff, and other participants. She stated that this would  
500 allow them to train on the Emergency Action Plan related to a couple of their high hazard dams.  
501 She stated that they were also conducting outreach to area residents to encourage them to opt into  
502 the CUA 911 Emergency Notification System.  
503

504 Ms. Fort stated that they were developing an audible warning system or siren system to  
505 immediately notify areas downstream of the Sugar Hollow Dam. She stated they were  
506 coordinating with VDOT regarding the potential installation of high-water flashing signs at roads  
507 and bridges, which are prone to flooding and located downstream of the dam. She stated that  
508 additionally, they were exploring educational opportunities and planning to put signage in the  
509 valley below the dam to alert both residents and visitors who may not be familiar with the fact  
510 that there is a dam and the associated risks.

511  
512 Ms. Fort stated that they had conducted community engagement since the event. She stated they  
513 held public meetings at the White Hall Ruritan Club on February 1 and March 14, where they  
514 shared information, answered questions, and gathered feedback from community members  
515 downstream of the dam. She stated that they also held a meeting with a smaller group of  
516 representatives consisting solely of downstream residents.

517  
518 Ms. Fort stated that the group is part of a small working team, and they first met with them on  
519 May 8, planning to meet every few months as they work through additional improvements at the  
520 dam. She stated that there was ongoing coordination with other community groups such as Trout  
521 Unlimited and Camp Sugar Hollow with a focus on the January 17<sup>th</sup> event and potential  
522 educational opportunities.

523  
524 Ms. Fort stated that regarding an audible warning system, it would be used in case of a  
525 catastrophic failure or malfunction of the dam. She stated that it is particularly effective for  
526 notifying people in heavily used recreational areas. She stated that they had gathered information  
527 by meeting with Fairfax Water and Howard County, Maryland to discuss their implementation of  
528 siren systems within their communities.

529  
530 Ms. Fort stated that Fairfax Water has a siren system they use to warn residents of a “sunny day”  
531 breach of the Occoquan Dam. She stated that this high hazard dam is for water supply in Fairfax  
532 County and specifically uses the siren system for sunny day breaches, not wet weather events.  
533 Ms. Fort stated that coordination with the town of Occoquan downstream has been established.

534  
535 Ms. Fort stated that Ellicott City, which is part of Howard County, Maryland, has developed a  
536 comprehensive flood warning and resiliency plan following high-profile fatal flood events in  
537 2016 and 2018. She stated that they provided valuable feedback on developing a system.

538  
539 Ms. Fort mentioned that they are currently gathering cost information, schedules, and pulling  
540 together what a project would include.

541  
542 She stated that operational parameters will need to be established and worked through. She stated  
543 that this plan may also serve as a good model for rolling out siren systems at the Ragged  
544 Mountain Dam, South Rivanna Dam, and Beaver Creek Dam, which are also high hazard  
545 facilities. She stated that staff would begin the study and design work in the second half of this  
546 year, with implementation likely occurring in 2025.

547  
548 Ms. Fort stated that there were some considerations for designing the system, such as under what  
549 scenarios would a siren system be employed. She stated that for example, would they only look



550 at a sunny day failure or malfunction, or would they also want to include a failure during a heavy  
551 rain event. She stated that they would also consider if the siren should be triggered automatically  
552 or require manual activation by operations staff. She stated that the decision could affect  
553 response time and the deciding matrix on whether an emergency reaches the level of need in the  
554 warning system.

555  
556 Ms. Fort stated that additionally, they would consider how much inundation area they expected  
557 to cover with these audible alarms, such as only the areas minutes downstream of the dam or the  
558 entire inundation area. She stated that this will impact the number of siren poles needed and  
559 other factors. She stated that they should further consider how this system would affect the  
560 community, including educating them on appropriate actions when the siren sounds and where to  
561 find more information.

562  
563 Ms. Fort stated that another consideration was whether these systems should be installed at all  
564 high-hazard facilities. She stated that lastly, they must consider funding options, including if  
565 there are grant funds available for this effort. She stated that this process is still in development,  
566 and she wanted to provide an update on its status. She stated that as they continue working  
567 through the process, they will provide further updates.

568  
569 Mr. Gaffney asked about the height of the water above the bridges when the bladders deflated.

570  
571 Ms. Fort stated that the first bridge, which was the one closest to the dam, experienced  
572 overtopping. She stated that unfortunately, they were unable to determine the exact extent of the  
573 overtopping because there was not a gauge nearby. She stated that the nearest gauge was located  
574 at Free Union Road. She stated that however, she confirmed that water had overtopped the  
575 bridge for a brief period. She stated that residents captured videos of the event, and the debris  
576 provided evidence of where the water had reached.

577  
578 Ms. Mallek stated that it was astonishing to see how lawn chairs and other belongings  
579 disappeared from people's properties, only to be found later at a height of 8 feet above the road.

580  
581 Ms. Fort stated that they conducted downstream reconnaissance afterward and since there was  
582 snow, it allowed them to visibly determine where the water level had reached before it melted.  
583 She stated that they have drone footage capturing the entire area.

584  
585 Mr. Pinkston stated that it was quite interesting how some municipalities differentiated between  
586 sunny days and wet weather events. He asked about why someone would choose only one or the  
587 other. He stated that he believed that it seemed logical to have both types of alarms in place. He  
588 asked if the different messaging came across as something significant.

589  
590 Ms. Fort stated that in a wet weather event, people are likely to receive warning of an  
591 approaching large storm system. She stated that in some cases, preemptive action can be taken at  
592 reservoirs when a significant storm is anticipated. She explained that there are other ways to  
593 warn individuals as well. She stated that they would not engage in activities like fishing or  
594 swimming during heavy rainfall.

595

596 Ms. Fort noted that the immediate hazard at Sugar Hollow and downstream areas would be  
597 reduced during wet weather due to fewer people being present. She stated that if they were there,  
598 concerns about cell signal or being in the river would arise. She stated that in such situations, the  
599 CUA 911 system would still be employed if it appeared that the dam was struggling with  
600 excessive water inflow during an extreme wet weather event.

601

602 Mr. Pinkston asked if they would receive an earlier forewarning in that case.

603

604 Ms. Fort stated that yes, there would be prior notice given, allowing for alternative methods of  
605 sharing the warning. She stated that the scenario at hand entailed a surprising, abrupt,  
606 devastating, instantaneous, and impending breakdown.

607

608 Mr. Gaffney stated that he had run multiple times on Sugar Hollow while training for marathons,  
609 starting at 6:00 am, even during winter months. He stated that it could have been a disaster if  
610 people were out there running, and an unexpected incident occurred. He stated that people also  
611 run in the rain.

612

613 Ms. Fort stated that she was at Sugar Hollow a few days prior to this meeting with their regional  
614 engineer from DCR. She stated that the engineer asked if she saw the kayakers on the river, and  
615 she mentioned it was January. She stated that he replied that they were crazy for being on the  
616 river after recent rainfall. She explained that people use the river for recreation year-round. She  
617 stated that unexpected sunny day failures or malfunctions are the biggest concern, but they  
618 would consider including any type of failure as they move forward with siren system planning.  
619 She stated that the other challenge she heard from Ellicott City is that during rain, it was noisy,  
620 which could make an audible warning system less effective than on a bright, sunny day. She  
621 stated they would need to design the system differently and still rely on alternative means of  
622 disseminating information.

623

624 Mr. Pinkston stated that one of the positive aspects of the situation was that they had taken the  
625 initiative to examine other dams within their system and determine what could be suitable there.  
626 He asked if staff had any idea about the authorities of this size or those with similar numbers of  
627 dams. He asked if there was something from the Water Works Association or someone else who  
628 could provide information on standard announcements like these, or if it was more of a case-by-  
629 case basis.

630

631 Ms. Fort stated that each case should be treated individually due to differences in topography, as  
632 the contours of the valley below Sugar Hollow vary greatly from those downstream of Occoquan  
633 and those found in Howard County. She emphasized that there was a need for a system tailored  
634 to the specific location. She stated it was not customary to have such systems at every facility.  
635 She stated that as a result, this would be beyond what states or federal agencies typically demand  
636 for a high-hazard facility.

637

638 Mr. Pinkston asked if there was a standard protocol at all.

639

640 Ms. Fort stated that if there were guidelines, she would definitely look for them during the design  
641 process. She stated that she was unaware of any standard requirements.

642

643 Mr. Mawyer stated that they needed to determine whether this may become the new norm. He  
644 stated that in retrospect, they may consider that they did need to have alarm systems in place at  
645 all of the dam locations.

646

647 Mr. Pinkston stated that he appreciated that when incidents like this occurred, there was an  
648 immediate response to learn from the situation and apply the lessons more broadly across their  
649 system.

650

651 Ms. Mallek stated that risk aversion was crucial in the situation, and everyone was quite  
652 fortunate. She asked if they already had a script for ECC. She stated that if so, it would be an  
653 ideal place for callers to receive consistent information when they were anxious. She stated that  
654 when people were anxious on the phone, it could be difficult to hear what the ECC representative  
655 was saying.

656

657 Ms. Mallek stated that from a training perspective, she emphasized that their message needed to  
658 be accurately incorporated into the script so that callers were aware of this opportunity and  
659 avoided ad-libbing.

660

661 Ms. Fort stated that in response to the question, they had pre-written scripts for their operations  
662 staff to use in the Emergency Action Plan. She stated that these scripts provided the correct  
663 wording and amount of information under various scenarios. She stated that they had been  
664 collaborating with ECC to develop templates for CUA 911 messages and pre-determined  
665 polygons for where those messages should be sent.

666

667 She stated that although ECC had templates for various scenarios within their system, they may  
668 not have anything that was specific to a dam related event. She stated that they were actively  
669 working with them to improve this aspect.

670

671

672 *b. Presentation: Rivanna Pump Station Submergence: Causation Report*  
673 *Jennifer Whitaker, P.E., Director of Engineering and Maintenance*

674 Jennifer Whitaker, Director of Engineering and Maintenance, stated that she would attempt to  
675 strike a balance between technical details and providing an overview of the emergency event at  
676 the Rivanna Pump Station earlier this year. She requested feedback if her explanation needed  
677 adjustments. She stated that as a brief reminder, the Rivanna Pump Station is located on Moores  
678 Creek's plant site and was constructed in 2017.

679

680 Ms. Whitaker stated that it consists of a wet side and a dry side. She stated that in the two dry  
681 side pump rooms, there are three pumps each: two large pumps and one small pump, totaling six  
682 pumps. She stated that the station has a total pumping capacity of 53 million gallons per day,  
683 receiving wastewater from approximately 66% of the urban area. She stated that they lift water  
684 about 110 feet to bring it into the headworks of the Moores Creek plant, which is just outside this  
685 Administrative building.

686

687 Ms. Whitaker stated she would begin by summarizing the events of January 9 as they were

688 known in real-time. She stated that as they progressed through this presentation, she would also  
689 reveal what they now know caused some of these events. She stated that on January 9, rain  
690 started at around 6:00 a.m., and by 10:00 a.m., it had become significant, leading to increased  
691 pumping to accommodate rising wastewater flows. She stated that at approximately 3:30 pm, the  
692 collection system became full of wastewater.

693

694 Mr. Pinkston asked what the collection system was.

695

696 Ms. Whitaker stated that it was the entire sewer system which led to this facility.

697

698 Mr. Mawyer stated that it included the piping from a house to the sewer main in the street, to the  
699 wastewater main pipes that led to the facility.

700

701 Mr. Pinkston asked if there was capacity remaining.

702

703 Ms. Whitaker stated yes. She stated that they have very large diameter pipes coming to the plant,  
704 and they usually had about 10 million gallons per day of flow consistently. She stated that these  
705 pipes were designed for wet weather flow, which means they could handle much higher flow  
706 rates created by infiltration of rainwater. She stated that there was typically excess capacity in  
707 these pipes. She stated that as it rained and flows increased, this capacity was consumed. She  
708 emphasized that this was an important issue that arose as these events unfolded. She stated that it  
709 was not until around 3:30 p.m. on that day that the system's capacity became full or was  
710 completely consumed.

711

712 Ms. Mallek asked if between 10:00 a.m. and 3:00 p.m., the normal stormwater drop-inlets into  
713 the wastewater system were not significantly affected by the rain, as 3 inches of rain is not  
714 considered substantial.

715

716 Ms. Whitaker clarified that 3.5 inches of rain is considered a two to five-year storm. She stated  
717 that the river responded as if it were a ten-year storm, which is intriguing considering the  
718 location of the rainfall. She stated that there was not a direct piping connection between the  
719 sewers and the stormwater system. She stated that wastewater systems experience something  
720 called inflow and infiltration, so over time during wet weather events, it causes an increase in the  
721 flows within the system.

722

723 Mr. Mawyer stated that due to cracks in pipes or manholes, rainwater would enter the wastewater  
724 system. He stated that it was not intended, but they must take this factor into account.

725

726 Ms. Whitaker stated that the next event took place around 3:45 p.m. when several pumps  
727 malfunctioned, causing alarms via SCADA for the operators. She stated that consequently, the  
728 operators went to the pump station and descended into the wet well to reset the pumps. She  
729 stated that while examining the wet well side, they observed the aluminum covers in the wet well  
730 were in place, which were there for odor control.

731

732 Ms. Whitaker stated that since there was no water above the covers, everything seemed normal  
733 despite the rain and high flows. She stated that by 4:58 p.m., a sump pump high level alarm

734 activated in Pump Room #1. She stated that initially, this alarm went unnoticed due to numerous  
735 alarms during storm events at the facility. She stated that given the size of the plant and the  
736 complexity of the alarms during a storm event, the sump pump high alarm was found after the  
737 fact.

738

739 Mr. Pinkston asked if that alarm indicated that water had reached a high point.

740

741 Ms. Whitaker stated that the alarm indicated that water was in the dry side of the pump station.  
742 She stated that it told them that during that time period, water was in the dry side of the pump  
743 station, although they were not aware of this fact at the time. She stated that analyzing the  
744 situation retrospectively, they now know it to be true.

745

746 Ms. Whitaker stated that they also believed that pressure in the collection sewer system was high  
747 enough to lift off several manhole lids (normally locked down with cam locks). There was  
748 enough pressure to discharge them from their normal location. She stated that around 5:37 p.m.  
749 that day the SCADA alarm began prompting some odd occurrences at the pump stations. She  
750 stated that by that time, flows had increased significantly, and operators started visiting all key  
751 pump stations at the plant.

752

753 Ms. Whitaker stated that at 6:00 p.m., they discovered 16 feet of water above the covers on the  
754 wet side and 5 feet of water in pump rooms, with water rising rapidly in stairways and pump  
755 rooms. She stated that by about 6:10 p.m., additional staff were notified, and crews began  
756 mobilizing to address the issue. She stated that it was almost midnight when staff went into  
757 Riverview Park to assess the status of the river. She stated that the river was flooded well into the  
758 park and up to the playground within Riverview Park.

759

760 She stated that on the next slide, she would like to talk about the event in four phases. She stated  
761 that she intended to touch on the first two phases quickly, as they had talked fairly extensively  
762 about the work done to date. She stated that phase one was constructing the initial 10 mgd bypass  
763 system, trying to get into the station to offload some of the flow elsewhere in the plant, and to  
764 stop overflows in Riverview Park.

765

766 Ms. Whitaker stated that during this phase, they installed a force main connection, constructed  
767 multiple bypass pumps, diverted flow partially through the plant to Moores Creek Pump Station,  
768 addressed sewer system overflows in the community, gained access to wet well covers, which  
769 took several weeks, and removed a broken valve at the headworks that limited their ability to  
770 respond. She stated that during that time period, they constructed a 10 million gallon per day  
771 bypass operation. She stated that during this same period, they began constructing the full 55  
772 million gallons per day bypass.

773

774 Ms. Whitaker stated that these photographs showed what was going on during that time period.  
775 She stated that one can observe from the images that it was quite cold, and they experienced  
776 several storm events with rain and snow. She stated that regarding the second phase, it involved  
777 constructing a 55 MGD bypass. She stated that in this phase, staff installed two 36-inch force  
778 main headers, modified connection structures, added extensive worksite fall protection for staff  
779 safety, and constructed seven bypass pumps.

780  
781 Ms. Whitaker stated that this phase was completed on February 14. She stated that she would  
782 now focus on the third phase, which was investigation. She emphasized that they did not wait for  
783 the entire process to conclude before taking action. She stated that as soon as the flow was  
784 controlled, they began the investigation to find out the cause of the issue. She stated that from  
785 January to June, they did a variety of things, and the photographs on the slide depicted some of  
786 those actions.

787  
788 Ms. Whitaker stated that they had to make the facility safe to enter, so a self-contained air  
789 inspection was conducted. She stated that after bringing in a cleaning team and disinfecting the  
790 entire facility, it became safe for people to go down inside and conduct investigative work. She  
791 stated that they had workers crawling all over the facility in the middle picture, examining what  
792 was happening in the lower level of the pump station. She stated that the electrical and controls  
793 investigation teams were visible in the bottom picture, attempting to recreate various scenarios  
794 that could have led to a problem.

795  
796 Ms. Whitaker stated that additionally, they conducted numerous interviews with staff members.  
797 She stated that they also modeled both the sewer system and the river system, and completed a  
798 detailed root cause analysis through workshops. She stated that by early June, they were able to  
799 submit their findings to the insurance carrier. She stated that the fourth and final phase will  
800 involve extensive restoration efforts. She stated that this phase would likely be discussed  
801 frequently in the coming months.

802  
803 Ms. Whitaker stated that they began the work to restore the station during the past few months  
804 while simultaneously conducting investigations. She stated that damaged equipment has been  
805 removed, marked, tagged, and labeled. She stated that MEB from Chesapeake was hired as their  
806 emergency construction contractor; they have been exceptional in their efforts. She stated that  
807 they photograph everything, wire-tag every bolt, nut, and screw, and set aside all demolition  
808 debris for insurance purposes. She stated that the insurance carrier has also been on-site to  
809 review the situation several times.

810  
811 Ms. Whitaker stated that provided on the slide was a list of some activities related to their  
812 investigation and restoration work. She stated that today's focus will be on root cause analysis  
813 and understanding what happened. She stated that she would discuss four factors that staff  
814 believed contributed to this incident. She stated that first, there was a complex pump system  
815 control failure, which created an opportunity for other factors to come into play. She stated that  
816 this malfunction can be considered the first domino to fall.

817  
818 Ms. Whitaker stated that second, water levels in the wet well and collection system rose rapidly.  
819 She stated that the reason this matters is that when they have capacity in the collection system,  
820 water levels rise slowly, allowing time to react and address issues. She stated that however, when  
821 events occur quickly, as they did here, there is very little time to respond.

822  
823 Ms. Whitaker stated that they believed that wastewater entered Pump Room 2 through an HVAC  
824 opening connecting in the stairwell adjacent to the wet well and the dry pump room. She stated  
825 that the elevation of the HVAC opening would not typically have wastewater present but, due to

826 rising levels in the wet well and stairwell, wastewater spilled into the dry side of the station. She  
827 explained that the pump station is not designed to be submerged, and with 35 feet of wastewater  
828 inside the station, it catastrophically destroyed the electrical equipment.

829  
830 Ms. Whitaker stated that the top left image showed the transducer, which normally hung above  
831 and out of the water to send signals indicating the water level. She stated that on the right side,  
832 top picture, float trees with individual wires controlled each pump's secondary backup system.  
833 She stated that they analyzed how these systems behaved individually and together.

834  
835 Ms. Whitaker stated that the final picture displayed the interior after dewatering the pump  
836 station. She explained that the pump systems were controlled by two overlapping systems. She  
837 stated that the primary system was controlled by the SCADA software and was told what to do  
838 by the level transducer. She stated that the primary system used the transducer to send signals to  
839 the pumps based on water surface changes. She stated that the second pump control system  
840 consisted of float trees.

841  
842 Ms. Whitaker stated that in this complex pump system malfunction, the ultrasonic transducer  
843 inaccurately measured the wastewater level in the wet-well. She stated that they normally want  
844 that transducer to sit above the water surface elevation because those types of devices have  
845 something called a blanking range. She stated that once the water level got into that range, it sent  
846 highly inaccurate and unreliable signals to the SCADA system and the pumps. She stated that at  
847 the Rivanna Pump Station, as seen in this graph on the right of the slide, the line represented the  
848 water surface measurement and was just shy of the covers.

849  
850 Ms. Whitaker stated that as the water level rose and entered the blanking range, the transducers  
851 told the pump station that the water level was dropping when it was actually rising. She stated  
852 that this was indicated by the red line going up and up as the station flooded. She stated that the  
853 station believed the transducers were functioning properly, but eventually one failed or broke due  
854 to submergence. She stated that what happened was the pumps were being turned on and off  
855 based on these faulty transducer levels when in fact the water level had risen into that blanking  
856 range and then above the control device, the transducer itself.

857  
858 Mr. Gaffney asked if the transducer worked underwater.

859  
860 Ms. Whitaker stated that the device was waterproof, but when water entered the blanking range,  
861 it provided inaccurate data. She stated that unfortunately, this issue occurred when the device  
862 indicated a decrease in water level. She stated that in response, it reduced the number of pumps  
863 operating. She stated that there were several compounding factors present in this situation.

864  
865 Ms. Whitaker stated that there were multiple overlapping problems, regrettably, involving  
866 identical reference points. She explained that there were two distinct pump operating systems or  
867 control systems, each designed as a backup for the other. She stated that both of them converged  
868 at that single point and malfunctioned due to different causes, but at the same time.

869  
870 Ms. Mallek stated that it was reasonable to question whether it was appropriate to have one  
871 measuring device located in one place and another one placed up in another place for computers

872 to determine if they were measuring the right level.

873

874 Ms. Whitaker stated that multiple workshops have been and would be conducted for this  
875 particular issue. She stated that they would elaborate on this matter throughout their discussion.  
876 She noted that they had installed covers in the wet well as an odor control measure. She pointed  
877 out that there were several issues with this approach, one being that when installing equipment  
878 such as this, which needed to be significantly above the water level, they might face a potential  
879 failure point.

880

881 Mr. Sanders asked if the system understood the blanking range was reached.

882

883 Ms. Whitaker stated that it did not. She stated that they ran into a similar issue on the South  
884 Rivanna Water Treatment Plant construction recently. She stated that the device could not be  
885 installed too close to the water due to manufacturer's instructions. She stated that the issue was  
886 an important consideration during installation. She stated that the high-water level should not  
887 have occurred and was what led to this specific scenario. She stated that regarding the displayed  
888 graph, the transducer controlled all the pumps. She stated that as the water level rose, it signaled  
889 for more pumps to be turned on.

890

891 Ms. Whitaker stated that the red line at the top of the graph represented 53 million gallons per  
892 day, which was the full capacity of the pump station. She stated that as the water level rose, it  
893 should have been turning on more and more pumps. She stated that what happened was that as  
894 the water level rose, the pumps stayed steady and more pumps did not come on. She explained  
895 that the system is designed in such a way that if the transducer system fails or they hit this level  
896 of 15 feet of water in the wet well, it should automatically switch the control of these pumps over  
897 to those floats. She stated that all the pumps should convert over.

898

899 Ms. Whitaker stated that unfortunately, again, that tiny range affected all of the pumps. She  
900 stated that multiple pumps tried to switch over within a very short time period. She stated that the  
901 water was rising rapidly, causing these pumps to switch to float control simultaneously or within  
902 minutes of each other. She stated that additionally, two of the pumps had a programmed set point  
903 limiting their output to 75% speed. She stated that this issue was unrelated to the other issues, but  
904 certainly compounded the issue. She stated that during a high flow event, all five pumps running  
905 at full speed are required to pump 53 million gallons per day out of the station.

906

907 Ms. Whitaker stated that when only four pumps were on, the pumps were programmed to run at  
908 100% speed. She stated that they still did not know why, but when the fifth pump was called to  
909 come on, the program was written to set the maximum speed for two pumps at 75%. She stated  
910 that even if all five pumps had successfully transitioned and were running, two still would have  
911 only been running at 75% speed. She stated that the transducer issue with the blanking range not  
912 giving good information was compounded with the pumps switching from transducer control to  
913 the float system, plus two pumps running at only 75% speed.

914

915 Mr. Gaffney stated that pumps four and six slowed down.

916

917 Ms. Whitaker stated that pump three was running throughout the entire event. She stated that



918 pumps one, two, and five shut down earlier. She stated that when operators received an alarm  
919 stating that pumps had stopped during the transition period, it was because pumps two and five  
920 were shut down. She stated that pumps two and five were restarted, but pump one never alarmed,  
921 and it never restarted; the reason for this remains unknown. She stated that they did not realize  
922 that pump one had shut down until a later time. She stated that pumps four and six slowed down  
923 due to the 75% speed setting.

924  
925 Ms. Whitaker stated that when all these events occurred simultaneously, they observed what was  
926 displayed on the graph provided on the current slide. She stated that they were pumping  
927 approximately 39 million gallons per day, which decreased to around 20 million gallons per day.  
928 She stated that within about 15 minutes, they lost this capacity within the pump station, and the  
929 flow never returned higher than roughly 35 to 40 million gallons per day, even though they knew  
930 that they had 40 to 45 million gallons entering the station.

931  
932 Mr. Pinkston asked if the process of switching from the transducer to the float system caused an  
933 electrical inrush issue.

934  
935 Ms. Whitaker stated that it was a control power issue. She explained that when the system  
936 switched over, the Variable Frequency Drive controlling the pump had some energy in it. She  
937 stated that it must de-energize to switch systems, pull the relay in and out, and communicate it  
938 was locked in and controlled. She stated that staff believed that it did not fully de-energize,  
939 which prevented it from switching over. She stated that it faulted three pumps and declared there  
940 was an issue via an alarm. She stated that it did that with three of the pumps. She stated that the  
941 VFD pulls the logic circuit in, and that circuit is what trips this out. She emphasized the need to  
942 focus on the details of that circuit.

943  
944 Mr. Mawyer asked if pumps two and five were manually restarted.

945  
946 Ms. Whitaker stated yes, that the operator restarted the pumps by going down into the station.

947  
948 Mr. Gaffney asked if pump one was shut off and never restarted.

949  
950 Ms. Whitaker stated that was correct. She stated that it never faulted or alarmed. She stated that  
951 at the station, there were typically six pumps in operation, with five running at a time. She stated  
952 that since no alarm was triggered to address this issue, pump one was not restarted. She  
953 explained that the collection system filled at almost the exact same time that the pump station  
954 reduced pumping capacity. She stated that this caused the water level to rise very rapidly, and  
955 this activated the blanking range on the transducer, tripping out three pumps and reducing the  
956 capacity of two others simultaneously. She stated that this led to manhole lids being blown off in  
957 the park and the water level rising quickly into the HVAC vent.

958  
959 Mr. Pinkston stated that the hydrodynamics of the entire wastewater collection system filled up  
960 rapidly, resulting in a sudden loss of capacity during an event that was not particularly rainy. He  
961 stated that it appeared that the system had been overwhelmed by technical glitches or logical  
962 issues. He stated that if the collection system had possessed more capacity or bandwidth, they  
963 would not have experienced the accelerating water and high-water elevation that ultimately

964 overtook the system. He stated that this was unusual because it involved the entire system rather  
965 than just a specific pump station.

966  
967 Ms. Whitaker clarified that they initially considered the capacity and wet weather flows coming  
968 in, thinking there might have been an extreme wet weather flow event that caused an inrush of  
969 flow. She stated that while the flows did increase due to wet weather, they did not rise  
970 extraordinarily high. She stated that it was not unusual for the collection system to be full after a  
971 rainy event. She stated that if the pumps had functioned properly, they would have pumped down  
972 the last section of the collection system and allowed them to pace the pumps on and off  
973 effectively.

974  
975 Ms. Whitaker stated that the sudden control system failure that occurred simultaneously with the  
976 collection system being full caused the issue. She stated that another aspect they considered was  
977 the settings of their pumps, which turned on and off at about half a foot apart from each other in  
978 terms of rise in the wet well. She stated that staff planned to examine whether they needed to  
979 have pumps coming on earlier, having pump controls with greater separation, or separating  
980 hydraulically from the elevation of the collection system.

981  
982 Ms. Whitaker stated that based on their findings, there was a question about whether the river  
983 entered the manholes first or if the manholes had wastewater come out of them first. She stated  
984 that they concluded that the collection system did fill, but the manhole frames and covers coming  
985 off were caused by internal hydraulic pressure. She stated that the connection to the river  
986 occurred later that night when it rose out of its banks. She stated that they conducted some river  
987 modeling and believed that the river did not go beyond its banks until well past when this event  
988 at the pump station was essentially complete.

989  
990 Ms. Mallek stated that when the river reached the manholes, it caused the additional amount of  
991 water in the wet well.

992  
993 Ms. Whitaker stated yes and that they needed to wait until the river level decreased before  
994 dewatering the station. She stated that the situation did not cause the problem but complicated  
995 the immediate response in the following few days. She stated that she believed the Board had  
996 seen the next photos and diagrams before. She stated that they provided a diagram showing the  
997 wet side of the pump station, with the wet well highlighted.

998  
999 Ms. Whitaker stated that there was a staircase leading down to the pump room, and the dry side  
1000 was approximately at the same level as the wet well. She stated that typically, water remained  
1001 within the wet well. She stated that as the water continued to rise, it breached this penetration in  
1002 the wall and flooded the pump room. She stated that the blue line indicated the highest point of  
1003 water within that facility.

1004  
1005 Mr. Pinkston asked when they believed this event happened.

1006  
1007 Ms. Whitaker stated that there was an alarm at 5:00 p.m. indicating water in Pump Room 1. She  
1008 stated that they hypothesized that the water may have been inside the building for up to half an  
1009 hour before the alarm sounded. She stated that the reason for this assumption was that the water

1010 had risen above the covers and exited the wet well. She stated that number one, on the diagram,  
1011 referred to a specific door located in the wet well area, which provided access to the stairways.  
1012 She stated that that door was completely destroyed; its frame was twisted and pulled out of the  
1013 concrete.

1014  
1015 Ms. Whitaker stated that the damage indicated that there were significant hydraulic forces at  
1016 play. She stated that the door had tried to hold back the water but eventually gave way and  
1017 became unmoored from the concrete. She stated that consequently, the water went in the  
1018 damaged doorway and rose in the stairway. She stated that regarding how the water entered  
1019 Pump Room 1, she explained that it likely came through the air intake located underneath the  
1020 bottom landing of the stairs. She stated that the grating on this intake allowed water to flow  
1021 inside the pump room. She stated that water then traveled down the HVAC ductwork and filled  
1022 the room.

1023  
1024 Ms. Whitaker stated that in this picture, one could see that the register was located just above the  
1025 pump floor level. She stated that from this vantage point, there were pumps, the register, and the  
1026 penetration. She stated that it was likely that no one thought water could reach such heights when  
1027 designing this facility. She stated that however, it did. She indicated the door connecting Pump  
1028 Room 2 to Pump Room 1. She stated that the force of the water bent the steel frame door inward,  
1029 dislodging the latch, which allowed floodwater to enter the second pump room. She stated that  
1030 they believed that approximately 15 minutes to 30 minutes before the floor alarm activated,  
1031 water may have already begun entering the facility.

1032  
1033 Mr. Pinkston stated that if they had not placed that duct there, the water would have gone all the  
1034 way up in the stairwell.

1035  
1036 Ms. Whitaker stated that it would have flooded the stairway, then eventually come out in  
1037 Riverview Park or one of the other manholes.

1038  
1039 Mr. Pinkston asked if it would have been separate from the dry side.

1040  
1041 Ms. Whitaker stated yes.

1042  
1043 Mr. Mawyer stated that the wet well and the stairwell would have filled with water.

1044  
1045 Ms. Mallek stated that there were places for more alarms to be put.

1046  
1047 Ms. Whitaker stated yes. She stated that since then, the three penetrations that went from the dry  
1048 side to the wet side had been blocked off and were completely sealed.

1049  
1050 Mr. Gaffney asked how they were heating and cooling the station.

1051  
1052 Ms. Whitaker stated that they were using temporary ventilation and treating it as a confined  
1053 space. She stated that therefore, the stairwell doors were propped open on both ends to create a  
1054 chimney effect. She stated that gas monitors were worn when going down to that area.

1055

1056 Ms. Whitaker stated that two pictures were provided to show the electrical disconnect boxes for  
1057 some equipment that was previously in the facility. She stated that getting instrumentation wet is  
1058 a problem, as wastewater is corrosive. She stated that it took their team almost two and a half  
1059 weeks to remove water from the facility and wash it down. She stated that as a result, they found  
1060 electrical control equipment at the lower level that had been affected by water.  
1061

1062 In summary, Ms. Whitaker explained that there was heavy rainfall, totaling 3.5 inches in 40  
1063 hours, which was a two to five-year storm event. She stated that the river's response was more  
1064 severe, resembling a 10-year storm event. She stated that at the time of pump station failure, they  
1065 estimated that approximately 43 million gallons of water per day were entering their system.  
1066

1067 Ms. Whitaker stated that the pump station should have been able to handle this flow as it has a  
1068 capacity of 53 million gallons. She stated that however, when the excess capacity of the  
1069 collection system was filled, the wet well level rose rapidly, reducing reaction time. She stated  
1070 that this rapid rise triggered simultaneous changes in pump control mechanisms on both the  
1071 transducer and float control sides, causing multiple pumps to fault. She stated that one pump  
1072 failed to restart, while others started but ran at reduced capacity after being restarted by  
1073 operators.  
1074

1075 Ms. Whitaker stated that the resulting pumping output was between 20 and 41 million gallons  
1076 per day. She stated that they knew that 43 million gallons were coming in, but they could only  
1077 manage to discharge between 20 and 41 million gallons. She stated that this led to surcharging in  
1078 the system, causing the wet well to rise further through HVAC penetrations, doorways, and  
1079 stairwells, eventually flooding the station and exacerbating the surcharging issue. She stated that  
1080 the surcharging occurred in the collection system when the manholes came off.  
1081

1082 Ms. Whitaker added that operators attempted to close an influent sluice gate at the entrance of  
1083 the pump station but could not due to corrosion in the tracks and the gate being seized. She stated  
1084 that as a result, the river overflowed its banks and connected to the pump station, preventing  
1085 dewatering until the river receded. She provided a table as a reference point for the 500-page  
1086 investigative document. She stated that she wanted to make sure that everyone was aware of its  
1087 availability and felt free to use it to understand the sequence of events.  
1088

1089 Ms. Whitaker stated that for their next steps, they would be working with their insurance carrier  
1090 over the next few months to discuss coverage, reimbursements, and investigations. She stated  
1091 that they are also conducting design workshops to address not only rehabilitating the pump  
1092 station as it was but making resiliency improvements as well. She stated that these include flood  
1093 proofing, HVAC relocation, and pump room isolation.  
1094

1095 Ms. Whitaker stated that the goal is to ensure that if the area were to flood again for any reason,  
1096 the dry side remains dry and the wet side stays wet. She stated that they are looking at  
1097 emergency bypass pumping connections. She stated that one of the things they learned during the  
1098 first couple weeks is how challenging this pump station is to install a pumping bypass. She stated  
1099 that controls, level sensing, and programming modifications will be part of the rehabilitation  
1100 process.  
1101

1102 Ms. Whitaker stated that they are currently working on the design, have ordered materials, and  
1103 are following a design-build process. She stated that parts and pieces are being removed,  
1104 ordered, and rebuilt as they proceeded over the next few months. She stated that by January  
1105 2025, they hope to remove the bypass pumping system and return the pump station to normal  
1106 operation by May 2025.

1107  
1108 Ms. Whitaker stated that they discussed authorizing a capital improvement project in the consent  
1109 agenda today, which includes this budget estimate. She stated that the funding for this estimate  
1110 comes from various sources, with one of the larger costs being the bypass pumping at \$350,000  
1111 per month for renting piping and pumping equipment.

1112  
1113 Mr. Pinkston asked if the insurance carrier had asked questions regarding the design of the  
1114 facility or engineering aspects that should have been taken into consideration to prepare for a  
1115 complicated failure such as this. He asked if there was a process that would develop as part of  
1116 working with Virginia Risk Sharing Association (VRSA) to address that question.

1117  
1118 Mr. Mawyer stated that hopefully, insurance would cover the cost of the entire event. He added  
1119 the insurance company was assessing the causation and the many provisions in the policy's  
1120 coverage.

1121  
1122 Mr. Mawyer stated that to assist them in case they face coverage debates, they had requested  
1123 assistance from Ms. Long and the attorneys with Williams Mullen. He stated that they have not  
1124 received a response from insurance regarding their desire to meet and discuss what occurred. He  
1125 stated that they have offered to present their information on the situation, explain it, and answer  
1126 their questions. He mentioned that the insurance provider has a sub-insurer, which is another  
1127 insurance company that the primary insurance company has involved to provide part of the  
1128 insurance coverage.

1129  
1130 Mr. Pinkston stated that the system had been in operation for seven years. He acknowledged that  
1131 a system like this would not be necessary for the entire thing, as he had never witnessed such a  
1132 complex one being warranted. He noted that the design engineer usually holds some professional  
1133 responsibility or stake in the outcome.

1134  
1135 Ms. Whitaker stated that the complexity of the situation was due to numerous contributing  
1136 factors. She stated that although everyone wished the HVAC penetration was not there, they had  
1137 seen it daily and never expressed a desire for its removal. She stated that there were control  
1138 issues, operational issues, and concerns about the isolation gate at the front, which they could not  
1139 operate. She stated that if she were to ask questions regarding this matter, she would direct them  
1140 to the design engineer, operators, and project management team. She stated that she would go  
1141 down the list and inquire about each aspect.

1142  
1143 Mr. Pinkston stated that there was not a clear-cut piece of evidence to explain the event as it was  
1144 a complicated situation. He stated that he was not trying to determine those causes but was  
1145 reacting to the public that they must answer to. He stated that it was a newer system, and he had  
1146 confidence in staff's understanding of what had occurred. He stated that however, there were  
1147 enough factors regarding the probability that a very unlikely event had occurred. He stated that

1148 he was unsure of how to explain to the public in a thoughtful way. He stated that staff had done a  
1149 great job figuring out what had happened and these were unforeseen events that could not have  
1150 been anticipated.

1151  
1152 Mr. Gaffney stated that if these issues had happened to another plant that had been designed with  
1153 this issue in mind, it would likely not have occurred.

1154  
1155 Ms. Mallek asked what information sharing allowed anyone to learn about these issues in order  
1156 to prepare proactively for them.

1157  
1158 Ms. Whitaker stated that there were two engineering firms involved in their restoration work:  
1159 one designed this pump station and is familiar with its design intent, allowing them to ask  
1160 questions about decisions made during construction. She stated that in some cases, there were  
1161 reasons behind certain choices that may have prevented catastrophe under different  
1162 circumstances.

1163  
1164 Ms. Whitaker stated that they had that firm working on it, and they also had another firm  
1165 conducting root cause analysis. She stated that these experts brought highly skilled  
1166 instrumentation and controls specialists into the mix. She stated that they also conducted  
1167 introspection with all their divisions and implemented lessons learned from this experience into  
1168 future designs, policies, and procedures. She stated that these changes aimed to improve the  
1169 overall performance of their plants in the long run.

1170  
1171 Mr. Sanders asked if the isolation gate had functioned correctly, would it have lessened some of  
1172 the damage or not made much impact.

1173  
1174 Ms. Whitaker stated that it would depend on when the gate was closed. She explained that  
1175 according to the timeline, when they attempted to shut the gate, most likely the water had already  
1176 entered the facility. She stated that if they had known about the water penetration earlier and  
1177 acted accordingly, they could have closed the gate, which would have pushed more wastewater  
1178 into the collection system and park system.

1179  
1180 Ms. Whitaker stated that this action would have limited their ability to divert some of the flow  
1181 through the rest of the plant. She stated that consequently, all the wastewater would have been  
1182 directed towards the collection system in the park and the river. She added that it is possible that  
1183 when they tried to close it, they were unaware that the pump station was already starting to flood.

1184  
1185 Mr. Pinkston stated that he assumed that the company who designed the pump station had been  
1186 completing similar projects in a variety of locations over a long period of time. He asked if these  
1187 systems were customized for individual systems or if they were mass-produced.

1188  
1189 Mr. Mawyer stated that there were differences in pump station size, capacity, and topography.  
1190 He stated that they would analyze all aspects of the findings provided by the insurance  
1191 company's engineers. He stated that they would examine whether the designer was responsible  
1192 for any issues, as well as staff operating and maintenance procedures. He stated that they would  
1193 consider the lessons learned from this experience. He mentioned that they had compiled a

1194 comprehensive list of items to integrate into their work program to prevent future occurrences.

1195

1196 Mr. Pinkston asked if they had standard commissioning agents who come in after complex  
1197 projects to thoroughly test them, or if the contractors handle this themselves.

1198

1199 Ms. Whitaker stated that they had not historically used commissioning agents. She stated that  
1200 even before the event occurred, discussions took place regarding the use of commissioning  
1201 agents for projects such as rebuilding the Administration building. She stated that their expertise  
1202 typically lies in industrial construction rather than office building construction.

1203

1204 Ms. Whitaker stated that bringing someone who knows how to run a building through its paces  
1205 had been contemplated for this particular reconstruction project. She stated that she believed that  
1206 staff were revisiting the way they start-up projects, particularly complex ones. She stated that in  
1207 the past, most of the work was carried out with their consulting engineer, occasionally involving  
1208 third-party inspectors for specialized inspections and utilizing their own staff. She stated that  
1209 conversations about this topic are ongoing.

1210

1211 Mr. Pinkston stated that commissioning a building of this type was evidently distinct from the  
1212 commission undertaken for a water plant or something similar. He stated that although there  
1213 were companies specialized in such commissions, their team possessed most of those skills  
1214 internally and could collaborate with contractors to initiate equipment operations. He stated that  
1215 considering the complexity of these systems, and switching between Variable Frequency Drive  
1216 and other components, perhaps it was reasonable for such intricate systems to involve third-party  
1217 involvement.

1218

1219 Ms. Whitaker stated that there have been discussions, particularly about the controls side. She  
1220 stated that they had a great IT SCADA and inspections team, but they could not always be  
1221 everywhere.

1222

1223 Mr. Pinkston stated that entire sector had become quite complex. He stated that all the features  
1224 and options available in these systems made them extremely complicated. He stated that he  
1225 believed they could have contributed to what happened here. He stated that he wanted to thank  
1226 staff and appreciated all their efforts to resolve this situation and resume normal operations for  
1227 the community.

1228

1229 Ms. Whitaker stated that the staff had been fantastic. She stated that she could not begin to  
1230 compliment how hard people had worked during this unfortunate situation.

1231

1232 Mr. Gaffney stated that Mr. Pinkston had summarized how the rest of the Board likely felt about  
1233 the events that had occurred over the past six months, the work completed, the thought put into  
1234 it, the risks involved, and the heroic efforts made.

1235

1236

1237 *c. Presentation: PFAS – Regulatory and Class-Action Litigation Update*

1238 *David Tungate, Director of Operations and Environmental Services*

1239 David Tungate, Director of Operations and Environmental Services, stated that he would provide

1240 an update on PFAS regulations, and the pending class action litigation. He stated that new PFAS  
1241 regulations were established on April 10,2024, which regulate five PFAS compounds and have a  
1242 sixth regulation related to various combinations of PFAS compounds in a Hazard Index  
1243 calculation. He stated that the new PFAS regulations are in parts per trillion, which are  
1244 equivalent to 1 inch in 16 million miles or one penny in \$10 billion.

1245  
1246 Mr. Tungate stated that South Fork Rivanna Reservoir, Sugar Hollow Reservoir, and Ragged  
1247 Mountain Reservoir supply water to the urban water system. He stated that Beaver Creek  
1248 Reservoir serves the Crozet water system, while Totier Creek Reservoir provides water for the  
1249 Scottsville system. He stated that the RWSA water treatment system consisted of five surface  
1250 water treatment plants: South Rivanna, Observatory, North Rivanna, Scottsville, Crozet, and a  
1251 groundwater system at the Red Hill. He explained that a Maximum Contaminant Level (MCL)  
1252 was the highest allowed concentration of contaminants in drinking water.

1253  
1254 Mr. Tungate stated that MCLs were set as close to MCL goals as feasible using the best available  
1255 treatment technology while considering cost. He stated that a MCL is an enforceable chemical  
1256 concentration that water utilities could not exceed. He stated that the MCL goal was a level  
1257 below which there was no known or expected health risk, allowing for a margin of safety. He  
1258 stated that non-enforceable public health goals also existed. He stated that most people had likely  
1259 encountered PFAS chemicals in their daily lives as they can be found in clothes, food wrappers,  
1260 and personal care products. The regulated PFAS compounds are PFOA, PFOS, PFHXS, GenX  
1261 chemicals, PFNA, and PFMS.

1262  
1263 Mr. Tungate explained that PFAS is present in various commonly used products: consumer  
1264 products like water and stain-resistant clothing, food packaging, fire extinguishing foams, waste  
1265 disposal sites, non-stick cookware, and drinking water. He stated that most Americans had been  
1266 exposed to some level of PFAS. According to the EPA, very little PFAS could enter one's body  
1267 through skin contact during activities like showering, bathing, and washing dishes.

1268  
1269 Mr. Tungate stated that PFAS refers to compounds with eight carbon atoms and adjoining  
1270 fluorine atoms, creating the carbon-fluorine bond as the root of the chemical structure. He stated  
1271 that there are variations that change the compounds themselves. He stated that Rivanna is proud  
1272 of its sampling history for PFAS. He stated that RWSA started sampling for PFAS in 2014, as  
1273 part of the federally required testing program UCMR3. He stated that since 2014, Rivanna has  
1274 collected more than 20 PFAS samples at the five surface water treatment plants and 16 times at  
1275 Red Hill Water Treatment Plant since acquiring the system in 2018.

1276  
1277 Mr. Tungate stated that each sample kit requires filling approximately 20 containers with water  
1278 for each location at around \$395 per sample. He stated that samples were collected from two  
1279 locations at each water treatment plant; raw and finished. The raw samples are prior to any water  
1280 treatment and the finished water is sampled prior to leaving the facility. Both locations are  
1281 sampled to identify potential sources of any detected chemicals. He stated that the cost for a  
1282 PFAS kit was \$395 with 20 bottles that need to be filled with water in each kit. He mentioned  
1283 that taking raw and finished samples from a water treatment plant would amount to almost \$800  
1284 for any sampling involving raw and finished sample locations.

1285



1286 Mr. Tungate stated that they had minimal detections of PFAS in the raw and finished water in the  
1287 RWSA water system. He next explained the results of the sampling event on May 24, 2023 at the  
1288 North Rivanna treatment plant. On May 24, 2023 a finished water PFAS sample detected PFOA  
1289 at a concentration of 25 parts per trillion. He pointed out that this is the highest concentration of  
1290 PFAS chemicals in the RWSA water system. Gen X and PFNA have never been detected in the  
1291 RWSA water system. He explained that Gen X chemical was the PFAS chemical detected by  
1292 the Western Virginia Water Authority at one of their water treatment plants.

1293

1294 Mr. Tungate proceeded to explain the hazard index calculation. He stated that the MCLs were  
1295 used as denominators in these index calculations and one the PFAS concentrations were used in  
1296 the numerator. All 4 of the fractions are added together with the Hazard Index MCL being 1.0.  
1297 A running annual average is used for Hazard Index calculation. He stated that he would next  
1298 discuss PFAS treatment. He stated that in 2012 the community decided to install Granular  
1299 Activated Carbon (GAC) contactors at all 5 of the water treatment plants. He stated that the  
1300 South Rivanna Treatment Plant, our largest water treatment plant, has eight granular activated  
1301 carbon contactors.

1302

1303 Mr. Tungate stated that granular activated carbon was one of the best treatment techniques  
1304 available for removing PFAS compounds. It does not remove all the PFAS chemicals. He stated  
1305 that they had six GAC contactors at Observatory, two smaller contactors at Crozet, which would  
1306 soon be increased to four, and two contactors at Scottsville. He added that RWSA has a project  
1307 to install another GAC contactor at Red Hill.

1308

1309 Mr. Tungate stated that the new PFAS regulations require initial quarterly monitoring at all entry  
1310 points in the distribution system by 2027. He mentioned that there are water utilities in the  
1311 country that had not yet sampled for PFAS. This part of the rule is to require quarterly sampling  
1312 by 2027. He stated that starting in 2027, all PFAS results are required to be in the Consumer  
1313 Confidence Reports (CCRs). He stated that Ms. Hildebrand's and Mr. Lunsford's staff would  
1314 handle this reporting process.

1315

1316 Mr. Tungate explained that compliance with the new PFAS regulation is based on a running  
1317 annual average. He stated that the quarterly compliance samples will start in 2028 for the running  
1318 annual average reporting in 2029. He stated that if the PFAS concentration is less than the MCL,  
1319 then zero is used for the running annual average calculation. He stated that in this example, with  
1320 a PFAS concentration of two in quarter one, three in quarter two, five in quarter three, and two in  
1321 quarter four, the running annual average calculation would be zero, zero, five, and zero because  
1322 the MCL is four.

1323

1324 Mr. Tungate stated that this is how EPA has required them to calculate the running annual  
1325 average. He mentioned that the EPA estimates that over many years, the PFAS MCL can prevent  
1326 PFAS exposure in drinking water for approximately 100 million people, prevent thousands of  
1327 deaths, and reduce tens of thousands of PFAS attributable illnesses. He stated that this  
1328 information is from the EPA's website.

1329

1330 Mr. Tungate pointed out that the American Water Works Association and the American  
1331 Metropolitan Water Association have filed a petition to appeal or repeal the MCL goals that were

1332 established by EPA. He stated that currently, there are four class action lawsuits: 3M, Dupont,  
1333 Tyco, and BASF. He stated that BASF was just announced two weeks ago. He added that  
1334 payments made to each class member who has not excluded themselves will be based on  
1335 allocation tables detailed in the estimated allocation tables that have been provided for Dupont  
1336 and 3M.

1337  
1338 Mr. Tungate stated that the Tyco and BASF allocation tables have not been released yet. He  
1339 stated that allocation will be reflected on factors such as the volume of water produced and the  
1340 PFAS concentration. He stated that he provided an estimate of the money RWSA would receive  
1341 based on the allocation tables for 3M and Dupont settlement: roughly \$1 million. He stated that  
1342 the settlement tables have not yet been adopted for Tyco and BASF. He stated that on the earlier  
1343 slides, the Tyco and BASF class action settlement amounts were lower than 3M and Dupont.

1344  
1345 Ms. Mallek asked if they had already tested the groundwater at Red Hill.

1346  
1347 Mr. Tungate stated yes; there had been no PFAS detections at Red Hill.

1348  
1349 Ms. Mallek stated that there was great concern about what was leaching into the wells. She stated  
1350 that the current well testing did not include PFAS tests, but she hoped they would provide it in  
1351 the future.

1352  
1353 Mr. Tungate stated that there was a considerable backlog regarding the UCMR 5 testing, which  
1354 includes PFAS. He stated that with the class action lawsuits and increased awareness of PFAS  
1355 in drinking water, has led to a significant increase in workload for labs that provide PFAS water  
1356 testing. There is a select number of EPA certified drinking water labs, and we all assume that  
1357 they will expand their testing capacity.

1358  
1359 Ms. Mallek stated that the EPA's budget included an expansion of testing capabilities for PFAS.

1360  
1361 Mr. Gaffney asked if the recycling of GAC material ensured PFAS was cleaned out before reuse.

1362  
1363 Mr. Tungate stated that there had been quite a lot of discussion on PFAS concentration in  
1364 reactivated GAC. The GAC contractor has confirmed that 99.9 % of all PFAS are destroyed in  
1365 the GAC reactivation process.

1366  
1367 Mr. Gaffney asked if they were using recycled GAC.

1368  
1369 Mr. Tungate stated yes.

1370  
1371 Mr. Gaffney asked if they were only using their own recycled GAC.

1372  
1373 Mr. Tungate confirmed that was correct; RWSA can only receive their own reactivated GAC.

1374  
1375 Mr. Gaffney asked if ACSA and the City were still considering filing in the PFAS class action  
1376 lawsuit individually.

1377

1378 Mr. Mawyer stated that they had decided that Rivanna would file on their behalf, because they  
1379 would make an award to only one utility. He stated that they agreed that if Rivanna received any  
1380 award, they would equally distribute it via our projects.

1381  
1382 Mr. Tungate stated that part of the class action lawsuit necessitated certification that RWSA was  
1383 the water treatment provider for both the City and the County, ensuring that they do not bear any  
1384 treatment expenses. He stated that this guarantees complete coverage.

1385  
1386 Mr. Gaffney asked if there was any known legislation for eliminating the manufacture of all  
1387 these chemicals. He stated that he had never heard once that it would happen.

1388  
1389 Mr. Mawyer stated that there is legislation to indemnify utilities, so that they cannot be sued for  
1390 putting PFAS back into the streams through the wastewater. He stated that he had not heard of  
1391 any regulation specifically targeting companies.

1392  
1393 Ms. Mallek stated that the wastewater testing will definitely be coming. She stated that the EPA  
1394 was nonconfrontational when they were asked to address the production of the chemicals, and  
1395 because it was a legislative issue, they should all consider contacting their congress  
1396 representatives. She stated that if they did not address the source, all of this work was pointless.

1397

1398 **10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA**

1399 There were none.

1400

1401 **11. CLOSED MEETING**

1402 There was no reason for a closed meeting.

1403

1404 **12. ADJOURNMENT**

1405 **At 4:19 p.m., Mr. Pinkston moved to adjourn the meeting of the Rivanna Water and Sewer**  
1406 **Authority. Ms. Mallek seconded the motion, which passed unanimously (5-0). (Mr.**  
1407 **O'Connell and Mr. Richardson were absent.)**

## MEMORANDUM

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

**FROM: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: EXECUTIVE DIRECTOR'S REPORT**

**DATE: JULY 23, 2024**

*STRATEGIC PLAN PRIORITY: EMPLOYEE DEVELOPMENT*

### **Internship Program**

We welcomed 4 summer interns in our 12-week program that started in May. Our interns are currently enrolled in an accredited trade school, college/university or recent graduate.

Our interns assist with a variety of duties including the collection of water samples, basic water quality testing using scientific field equipment at five drinking water reservoirs, streams, as well as at various water treatment plants. They regularly process and analyze data collected and maintain spreadsheets and data trends on water quality data.



Left to Right:

- |                     |  |
|---------------------|--|
| ➤ Jenny Little      | Wastewater Operations and Administration |
| ➤ Sofia Beard       | Water Operations and Chemistry Lab       |
| ➤ Florence Pinkston | Wastewater Operations                    |
| ➤ Ben Stevens       | Information Technology/SCADA             |

We have chosen the firm “PoliHire”, out of Washington, D.C., to help us recruit for our Deputy Executive Director position.

We have issued a Request for Quote for the completion of a Compensation and Classification Study. We expect to complete the study by the end of the calendar year.

*STRATEGIC PLAN PRIORITY: ENVIRONMENTAL STEWARDSHIP*

**Drought Update**

The South Rivanna Reservoir stopped overflowing on July 10, 2024. Our Water Department implemented our operational optimization strategy on July 18 to reduce withdrawals from the South Rivanna Reservoir and increase withdrawals from Ragged Mtn Reservoir. The Rivanna Regional Drought Response Committee (City, County, ACSA, RWSA) met on July 17 to review local conditions and consider future drought stages if water supply conditions continue to decline. According to the National Oceanic and Atmospheric Administration (NOAA) and National Integrated Drought Information System (NIDIS), Charlottesville and Albemarle County experienced the 4<sup>th</sup> driest June on record, which is over the past 130 years.

*STRATEGIC PLAN PRIORITY: PLANNING AND INFRASTRUCTURE*

**Grant Award**

We received a \$198,930 grant award for a “Flood Protection Resiliency Design and Scoping Project” from the Federal Emergency Management Agency (FEMA) and Virginia Department of Emergency Management (VDEM). This funding will be used to identify individualized flood mitigation measures to increase facility resiliency from a 1% flooding event to a 0.2% flooding event. Facilities include: Mechums River Raw Water PS, Glenmore WW PS, Moores Creek AWRRF, Scottsville WRRF, Crozet FET, and Crozet WW PS #2.

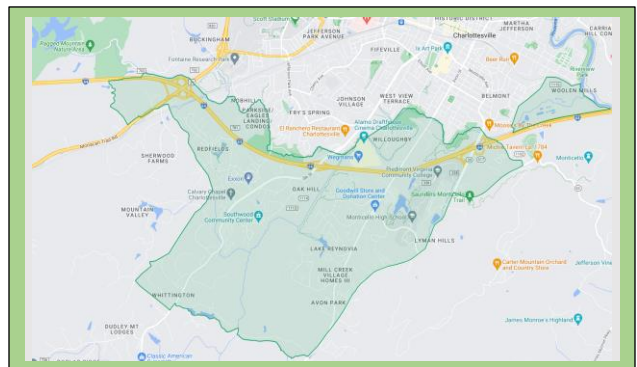
Due to changing climate conditions, precipitation is predicted to be less frequent but in higher intensity events, leading to greater chances of flooding. This study will consider measures to protect our facilities in low elevation areas, typically wastewater facilities.

*STRATEGIC PLAN PRIORITY: COMMUNICATION AND COLLABORATION*

**Community Outreach**

**5<sup>th</sup> and Avon Community Advisory Committee**

Jennifer Whitaker, Director of Engineering and Maintenance gave a presentation to the 5<sup>th</sup> and Avon Community Advisory Committee on June 20 and shared information about RWSA and area specific projects.





### MEMORANDUM

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

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

**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: MAY MONTHLY FINANCIAL SUMMARY – FY 2024**

**DATE: JULY 23, 2024**

#### Financial Snapshot

The Authority has an overall net deficit of \$3,122,300 for the first eleven months of this fiscal year due to unforeseen Urban Wastewater operations and maintenance expenses. Total revenues (operating and debt service) are \$1,842,200 over budget estimates, which is helping to offset the overrun in expenses. Urban Water flows and operations rate revenue are 0.6% above budget estimates, and Urban Wastewater flows and operations rate revenue are 8% over budget. Total expenses are \$4,172,600 over budget.

In June, the Board approved a new capital project for the Rivanna Pump Station restoration. This will move \$3.6 million in expenses relative to the pump station emergency to the capital project account and out of the operating budget. This effectively adjusts the deficit by the same amount, which for May would cause a pro forma net results surplus of **\$477,700**. Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
<b>Operations</b>				
Revenues	\$ 9,501,191	\$ 10,565,614	\$ 2,618,362	\$ 22,685,167
Expenses	(9,792,619)	(13,572,735)	(2,640,415)	(26,005,769)
Surplus (deficit)	<u>\$ (291,428)</u>	<u>\$ (3,007,121)</u>	<u>\$ (22,053)</u>	<u>\$ (3,320,602)</u>
<b>Debt Service</b>				
Revenues	\$ 10,181,122	\$ 9,490,733	\$ 2,474,253	\$ 22,146,108
Expenses	(10,092,772)	(9,396,081)	(2,458,931)	(21,947,784)
Surplus (deficit)	<u>\$ 88,350</u>	<u>\$ 94,652</u>	<u>\$ 15,322</u>	<u>\$ 198,324</u>
<b>Total</b>				
Revenues	\$ 19,682,313	\$ 20,056,347	\$ 5,092,615	\$ 44,831,275
Expenses	(19,885,391)	(22,968,816)	(5,099,346)	(47,953,553)
Surplus (deficit)	<u>\$ (203,078)</u>	<u>\$ (2,912,469)</u>	<u>\$ (6,731)</u>	<u>\$ (3,122,278)</u>

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

## **Detailed Financials**

The Authority's total operating revenues through May are \$1,045,100 over the prorated annual budget estimates, and operating expenses are over budget by \$4,365,700, resulting in a net operating deficit of \$3,320,600. The following comments explain most of the other budget vs. actual variances.

- A. Annual and Quarterly Transactions - Some revenues and expenses are over the prorated year-to-date budget due to one-time receipts of revenues for the year and quarterly or annual payments of expenses. These transactions appear to have significant impacts on the budget vs. actual monthly comparisons but usually even out as the year progresses. Septage receiving support revenue of \$109,440 is billed to the County annually in July. Annual payments are made in the first quarter for certain maintenance agreements and for employer contributions to employees' health savings accounts. The annual payment to UVA for the Observatory lease (\$175,000) was made in September. Insurance premiums are paid at the beginning of each quarter.
- B. Personnel Costs (Urban Water, Urban Wastewater, Maintenance – pages 2,5,9) – Some department's salaries are higher than budgeted due to pay increases for plant operators who achieved higher licenses. Urban Water also had some large final leave payouts this fiscal year. The Maintenance department has exceeded the annual budget for overtime and holiday pay due to emergency maintenance needs of the Rivanna Pump Station.
- C. Other Services & Charges (Urban Water, Crozet Water, Scottsville Water, Urban Wastewater, Glenmore Wastewater – pages 2 to 6) – Utility costs are running higher than originally estimated for Urban Wastewater and Glenmore and all Water departments. Urban Water incurred \$54,400 in unbudgeted watershed management expenses, and Scottsville Water's laboratory analysis fees are running high due to testing for PFAS. Urban Water, Crozet Water, and Urban Wastewater paid unbudgeted annual DEQ permit application fees of \$25,000, \$15,000, and \$10,650, respectively.
- D. Equipment Purchases (Urban Water – page 2) Urban Water incurred \$12,700 unbudgeted equipment rental costs related to the water line break on Rt. 29N.
- E. Communications (Administration – page 8) – Telephone and data service costs for the Administration department are \$24,800 over the annual budget.
- F. Professional Services (Urban Water, Urban Wastewater, Administration – pages 2,5,8) – Urban Water and Urban Wastewater have exceeded the annual budget for legal fees by \$28,000 and 15,000, respectively. Urban Wastewater has spent \$41,200 more than the annual budget on engineering and technical services costs, related to a BOD wastewater sampling study and Rivanna Pump Station permitting. The Administration department incurred \$23,200 in unbudgeted subcontract SCADA services in this category.

- G. Operations & Maintenance (Urban Water, Urban Wastewater – page 2,5) – Urban Wastewater has incurred unbudgeted emergency pipelines and appurtenances costs related to the mitigation and bypass pump installation and operations for the Rivanna Pump Station incident totaling \$3.6 million through May. Chemical costs are running high for Urban Water and Urban Wastewater.
- H. Information Technology (Scottsville Water – page 4) - Scottsville Water is over budget on SCADA costs related to upgrading PLC and communication hardware at the “795” water storage tank previously owned by ACSA.



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

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

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$	22,727,003	\$	20,833,086	\$	21,611,188	\$	778,102	3.73%
Lease Revenue		124,000		113,667		128,500		14,833	13.05%
Admin., Maint. & Engineering Revenue		781,000		715,917		732,564		16,647	2.33%
Other Revenues		647,267		593,328		668,799		75,471	12.72%
Use of Reserves (Water Resources Fund)		80,000		73,333		80,000		6,667	9.09%
Interest Allocation		47,250		43,313		196,680		153,367	354.10%
<b>Total Operating Revenues</b>	<b>\$</b>	<b>24,406,520</b>	<b>\$</b>	<b>22,372,643</b>	<b>\$</b>	<b>23,417,731</b>	<b>\$</b>	<b>1,045,087</b>	<b>4.67%</b>

**Expenses**

Personnel Cost	<b>B</b>	\$	11,625,091	\$	10,656,334	\$	10,702,554	\$	(46,220)	-0.43%
Professional Services	<b>F</b>		467,850		428,863		467,075		(38,212)	-8.91%
Other Services & Charges	<b>C</b>		3,479,955		3,189,959		3,903,295		(713,336)	-22.36%
Communications	<b>E</b>		221,440		202,987		250,491		(47,504)	-23.40%
Information Technology			1,269,575		1,163,777		1,089,744		74,033	6.36%
Supplies			46,300		42,442		49,389		(6,948)	-16.37%
Operations & Maintenance	<b>A, G</b>		6,035,808		5,532,824		9,167,587		(3,634,763)	-65.69%
Equipment Purchases	<b>D</b>		345,500		316,708		269,449		47,259	14.92%
Depreciation			915,000		838,750		838,750		-	0.00%
<b>Total Operating Expenses</b>		<b>\$</b>	<b>24,406,519</b>	<b>\$</b>	<b>22,372,643</b>	<b>\$</b>	<b>26,738,334</b>	<b>\$</b>	<b>(4,365,691)</b>	<b>-19.51%</b>
<b>Operating Surplus/(Deficit)</b>		<b>\$</b>	<b>1</b>	<b>\$</b>	<b>0</b>	<b>\$</b>	<b>(3,320,603)</b>			

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$	22,119,060	\$	20,275,805	\$	20,275,816	\$	11	0.00%
Septage Receiving Support - County		109,440		100,320		109,440		9,120	9.09%
Buck Mountain Lease Revenue		1,600		1,467		13,523		12,056	822.00%
Trust Fund Interest		179,830		164,844		341,995		177,151	107.47%
Reserve Fund Interest		879,900		806,575		1,405,335		598,760	74.23%
<b>Total Debt Service Revenues</b>	<b>\$</b>	<b>23,289,830</b>	<b>\$</b>	<b>21,349,011</b>	<b>\$</b>	<b>22,146,108</b>	<b>\$</b>	<b>797,097</b>	<b>3.73%</b>

**Debt Service Costs**

Total Principal & Interest	\$	16,168,944	\$	14,821,532	\$	14,821,532	\$	-	0.00%
Reserve Additions-Interest		879,900		806,575		1,405,335		(598,760)	-74.23%
Debt Service Ratio Charge		725,000		664,583		664,583		-	0.00%
Reserve Additions-CIP Growth		5,516,000		5,056,333		5,056,333		-	0.00%
<b>Total Debt Service Costs</b>	<b>\$</b>	<b>23,289,844</b>	<b>\$</b>	<b>21,349,024</b>	<b>\$</b>	<b>21,947,783</b>	<b>\$</b>	<b>(598,760)</b>	<b>-2.80%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$</b>	<b>(14)</b>	<b>\$</b>	<b>(13)</b>	<b>\$</b>	<b>198,325</b>			

<b>Summary</b>									
<b>Total Revenues</b>	\$	47,696,350	\$	43,721,654	\$	45,563,839	\$	1,842,185	4.21%
<b>Total Expenses</b>		47,696,363		43,721,667		48,686,117		(4,964,450)	-11.35%
<b>Surplus/(Deficit)</b>	<b>\$</b>	<b>(13)</b>	<b>\$</b>	<b>(12)</b>	<b>\$</b>	<b>(3,122,278)</b>			

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

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

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

**Operating Budget vs. Actual**

	Notes					
<b>Revenues</b>						
Operations Rate Revenue		\$ 10,021,362	\$ 9,186,249	\$ 9,238,037	\$ 51,789	0.56%
Lease Revenue		94,000	86,167	98,343	12,176	14.13%
Miscellaneous		-	-	829	829	
Use of Reserves (Water Resources Fund)		80,000	73,333	80,000	6,667	9.09%
Interest Allocation		34,200	31,350	83,982	52,632	167.89%
<b>Total Operating Revenues</b>		<b>\$ 10,229,562</b>	<b>\$ 9,377,099</b>	<b>\$ 9,501,191</b>	<b>\$ 124,093</b>	<b>1.32%</b>
<b>Expenses</b>						
Personnel Cost	B	\$ 2,384,332	\$ 2,185,638	\$ 2,279,640	\$ (94,002)	-4.30%
Professional Services	F	178,500	163,625	211,840	(48,215)	-29.47%
Other Services & Charges	C	769,233	705,130	1,143,089	(437,959)	-62.11%
Communications		103,200	94,600	84,066	10,534	11.14%
Information Technology		127,650	117,013	93,487	23,526	20.11%
Supplies		7,000	6,417	15,001	(8,584)	-133.77%
Operations & Maintenance	A, G	2,905,068	2,662,979	2,668,790	(5,811)	-0.22%
Equipment Purchases	D	20,100	18,425	31,132	(12,707)	-68.97%
Depreciation		300,000	275,000	275,000	-	0.00%
<b>Subtotal Before Allocations</b>		<b>\$ 6,795,083</b>	<b>\$ 6,228,826</b>	<b>\$ 6,802,044</b>	<b>\$ (573,218)</b>	<b>-9.20%</b>
Allocation of Support Departments		3,434,478	3,148,272	2,990,575	157,697	5.01%
<b>Total Operating Expenses</b>		<b>\$ 10,229,561</b>	<b>\$ 9,377,098</b>	<b>\$ 9,792,619</b>	<b>\$ (415,521)</b>	<b>-4.43%</b>
<b>Operating Surplus/(Deficit)</b>		<b>\$ 1</b>	<b>\$ 1</b>	<b>\$ (291,427)</b>		

**Debt Service Budget vs. Actual**

<b>Revenues</b>						
Debt Service Rate Revenue		\$ 10,193,779	\$ 9,344,297	\$ 9,344,302	\$ 5	0.00%
Trust Fund Interest		77,500	71,042	147,331	76,290	107.39%
Reserve Fund Interest		423,100	387,842	675,966	288,124	74.29%
Lease Revenue		1,600	1,467	13,523	12,056	822.00%
<b>Total Debt Service Revenues</b>		<b>\$ 10,695,979</b>	<b>\$ 9,804,647</b>	<b>\$ 10,181,122</b>	<b>\$ 376,475</b>	<b>3.84%</b>
<b>Debt Service Costs</b>						
Total Principal & Interest		\$ 6,964,779	\$ 6,384,381	\$ 6,384,381	\$ -	0.00%
Reserve Additions-Interest		423,100	387,842	675,966	(288,124)	-74.29%
Debt Service Ratio Charge		400,000	366,667	366,667	-	0.00%
Est. New Debt Service - CIP Growth		2,908,100	2,665,758	2,665,758	-	0.00%
<b>Total Debt Service Costs</b>		<b>\$ 10,695,979</b>	<b>\$ 9,804,647</b>	<b>\$ 10,092,772</b>	<b>\$ (288,124)</b>	<b>-2.94%</b>
<b>Debt Service Surplus/(Deficit)</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 88,350</b>		

Rate Center Summary						
<b>Total Revenues</b>		\$ 20,925,541	\$ 19,181,746	\$ 19,682,314	\$ 500,568	2.61%
<b>Total Expenses</b>		20,925,540	19,181,745	19,885,391	(703,645)	-3.67%
<b>Surplus/(Deficit)</b>		<b>\$ 1</b>	<b>\$ 1</b>	<b>\$ (203,077)</b>		
<b>Costs per 1000 Gallons</b>		\$ 3.01		\$ 3.13		
<b>Operating and DS</b>		\$ 6.16		\$ 6.35		
<b>Thousand Gallons Treated</b>		3,397,700	3,114,558	3,132,600	18,042	0.58%
<b>or</b>						
<b>Flow (MGD)</b>		9.309		9.323		

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

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

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$ 1,234,752	\$ 1,131,856	\$ 1,131,856	\$ -	0.00%
Lease Revenues	30,000	27,500	30,157	2,657	9.66%
Interest Allocation	4,600	4,217	11,211	6,994	165.87%
<b>Total Operating Revenues</b>	<b>\$ 1,269,352</b>	<b>\$ 1,163,573</b>	<b>\$ 1,173,224</b>	<b>\$ 9,651</b>	<b>0.83%</b>

**Expenses**

Personnel Cost	\$ 341,691	\$ 313,217	\$ 319,183	\$ (5,967)	-1.90%
Professional Services	22,900	20,992	96	20,896	99.54%
Other Services & Charges	C 133,426	122,307	159,424	(37,117)	-30.35%
Communications	17,600	16,133	15,012	1,121	6.95%
Information Technology	32,400	29,700	16,078	13,622	45.87%
Supplies	1,500	1,375	1,260	115	8.35%
Operations & Maintenance	335,700	307,725	299,989	7,736	2.51%
Equipment Purchases	3,200	2,933	3,663	(730)	-24.88%
Depreciation	60,000	55,000	55,000	-	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 948,417</b>	<b>\$ 869,382</b>	<b>\$ 869,707</b>	<b>\$ (325)</b>	<b>-0.04%</b>
Allocation of Support Departments	320,940	294,195	279,937	14,258	4.85%
<b>Total Operating Expenses</b>	<b>\$ 1,269,357</b>	<b>\$ 1,163,577</b>	<b>\$ 1,149,644</b>	<b>\$ 13,933</b>	<b>1.20%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ (5)</b>	<b>\$ (4)</b>	<b>\$ 23,580</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 2,385,720	\$ 2,186,910	\$ 2,186,910	\$ -	0.00%
Trust Fund Interest	13,500	12,375	25,752	13,377	108.10%
Reserve Fund Interest	34,500	31,625	54,808	23,183	73.31%
<b>Total Debt Service Revenues</b>	<b>\$ 2,433,720</b>	<b>\$ 2,230,910</b>	<b>\$ 2,267,470</b>	<b>\$ 36,560</b>	<b>1.64%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 1,216,725	\$ 1,115,331	\$ 1,115,331	\$ -	0.00%
Reserve Additions-Interest	34,500	31,625	54,808	(23,183)	-73.31%
Estimated New Principal & Interest	1,182,500	1,083,958	1,083,958	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 2,433,725</b>	<b>\$ 2,230,915</b>	<b>\$ 2,254,098</b>	<b>\$ (23,183)</b>	<b>-1.04%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ (5)</b>	<b>\$ (5)</b>	<b>\$ 13,373</b>		

<b>Rate Center Summary</b>					
<b>Total Revenues</b>	\$ 3,703,072	\$ 3,394,483	\$ 3,440,694	\$ 46,211	1.36%
<b>Total Expenses</b>	3,703,082	3,394,492	3,403,741	(9,250)	-0.27%
<b>Surplus/(Deficit)</b>	<b>\$ (10)</b>	<b>\$ (9)</b>	<b>\$ 36,952</b>		
<b>Costs per 1000 Gallons</b>	\$ 6.26		\$ 5.52		
<b>Operating and DS</b>	\$ 18.27		\$ 16.34		
<b>Thousand Gallons Treated</b>	202,697	185,806	208,258	22,452	12.08%
<b>Flow (MGD)</b>	0.555		0.620		

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

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

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$ 656,460	\$ 601,755	\$ 601,755	\$ -	0.00%
Interest Allocation	2,150	1,971	5,310	3,340	169.45%
<b>Total Operating Revenues</b>	<b>\$ 658,610</b>	<b>\$ 603,726</b>	<b>\$ 607,065</b>	<b>\$ 3,340</b>	<b>0.55%</b>

**Expenses**

Personnel Cost	\$ 223,641	\$ 205,004	\$ 211,940	\$ (6,936)	-3.38%
Professional Services	5,000	4,583	3,455	1,129	24.63%
Other Services & Charges	<b>C</b> 31,800	29,150	50,361	(21,211)	-72.76%
Communications	6,750	6,188	15,252	(9,064)	-146.49%
Information Technology	<b>H</b> 19,700	18,058	39,346	(21,288)	-117.88%
Supplies	100	92	574	(482)	-526.02%
Operations & Maintenance	134,800	123,567	124,382	(816)	-0.66%
Equipment Purchases	2,000	1,833	2,863	(1,030)	-56.16%
Depreciation	40,000	36,667	36,667	0	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 463,791</b>	<b>\$ 425,142</b>	<b>\$ 484,839</b>	<b>\$ (59,697)</b>	<b>-14.04%</b>
Allocation of Support Departments	194,815	178,580	170,668	7,912	4.43%
<b>Total Operating Expenses</b>	<b>\$ 658,606</b>	<b>\$ 603,722</b>	<b>\$ 655,507</b>	<b>\$ (51,785)</b>	<b>-8.58%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 4</b>	<b>\$ 4</b>	<b>\$ (48,442)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 158,736	\$ 145,508	\$ 145,508	\$ -	0.00%
Trust Fund Interest	1,650	1,513	3,146	1,634	108.03%
Reserve Fund Interest	10,300	9,442	16,864	7,422	78.61%
<b>Total Debt Service Revenues</b>	<b>\$ 170,686</b>	<b>\$ 156,462</b>	<b>\$ 165,518</b>	<b>\$ 9,056</b>	<b>5.79%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 148,991	\$ 136,575	\$ 136,575	\$ -	0.00%
Reserve Additions-Interest	10,300	9,442	16,864	(7,422)	-78.61%
Estimated New Principal & Interest	11,400	10,450	10,450	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 170,691</b>	<b>\$ 156,467</b>	<b>\$ 163,889</b>	<b>\$ (7,422)</b>	<b>-4.74%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ (5)</b>	<b>\$ (5)</b>	<b>\$ 1,629</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 829,296	\$ 760,188	\$ 772,584	\$ 12,396	1.63%
<b>Total Expenses</b>	829,297	760,189	819,396	(59,207)	-7.79%
<b>Surplus/(Deficit)</b>	<b>\$ (1)</b>	<b>\$ (1)</b>	<b>\$ (46,813)</b>		
<b>Costs per 1000 Gallons</b>	\$ 38.22		\$ 40.90		
<b>Operating and DS</b>	\$ 48.13		\$ 51.12		
<b>Thousand Gallons Treated</b>	17,230	15,794	16,028	234	1.48%
<b>or</b>					
<b>Flow (MGD)</b>	0.047		0.048		

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

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

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$ 9,908,321	\$ 9,082,628	\$ 9,808,941	\$ 726,313	8.00%
Stone Robinson WWTP	17,267	15,828	30,227	14,398	90.97%
Septage Acceptance	550,000	504,167	583,469	79,302	15.73%
Nutrient Credits	80,000	73,333	49,915	(23,418)	-31.93%
Miscellaneous Revenue	-	-	4,360	4,360	
Interest Allocation	3,300	3,025	88,703	85,678	2832.32%
<b>Total Operating Revenues</b>	<b>\$ 10,558,888</b>	<b>\$ 9,678,981</b>	<b>\$ 10,565,614</b>	<b>\$ 886,633</b>	<b>9.16%</b>

**Expenses**

Personnel Cost	B \$ 1,458,300	\$ 1,336,775	\$ 1,402,452	\$ (65,677)	-4.91%
Professional Services	F 40,000	36,667	95,333	(58,667)	-160.00%
Other Services & Charges	C 2,271,556	2,082,260	2,317,721	(235,462)	-11.31%
Communications	11,600	10,633	13,730	(3,096)	-29.12%
Information Technology	110,600	101,383	87,002	14,381	14.19%
Supplies	1,200	1,100	3,544	(2,444)	-222.16%
Operations & Maintenance	G 2,086,800	1,912,900	5,623,539	(3,710,639)	-193.98%
Equipment Purchases	73,500	67,375	70,536	(3,161)	-4.69%
Depreciation	470,000	430,833	430,833	(0)	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 6,523,556</b>	<b>\$ 5,979,927</b>	<b>\$ 10,044,690</b>	<b>\$ (4,064,764)</b>	<b>-67.97%</b>
Allocation of Support Departments	4,035,331	3,699,053	3,528,045	171,008	4.62%
<b>Total Operating Expenses</b>	<b>\$ 10,558,887</b>	<b>\$ 9,678,980</b>	<b>\$ 13,572,735</b>	<b>\$ (3,893,756)</b>	<b>-40.23%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 1</b>	<b>\$ 1</b>	<b>\$ (3,007,122)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 9,339,509	\$ 8,561,217	\$ 8,561,223	\$ 6	0.00%
Septage Receiving Support - County	A 109,440	100,320	109,440	9,120	9.09%
Trust Fund Interest	86,900	79,658	165,184	85,525	107.37%
Reserve Fund Interest	410,200	376,017	654,886	278,869	74.16%
<b>Total Debt Service Revenues</b>	<b>\$ 9,946,049</b>	<b>\$ 9,117,212</b>	<b>\$ 9,490,733</b>	<b>\$ 373,521</b>	<b>4.10%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 7,812,249	\$ 7,161,228	\$ 7,161,228	\$ -	0.00%
Reserve Additions-Interest	410,200	376,017	654,886	(278,869)	-74.16%
Debt Service Ratio Charge	325,000	297,917	297,917	-	0.00%
Est. New Debt Service - CIP Growth	1,398,600	1,282,050	1,282,050	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 9,946,049</b>	<b>\$ 9,117,212</b>	<b>\$ 9,396,081</b>	<b>\$ (278,869)</b>	<b>-3.06%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 94,652</b>		

**Rate Center Summary**

<b>Total Revenues</b>	\$ 20,504,937	\$ 18,796,192	\$ 20,056,346	\$ 1,260,154	6.70%
<b>Total Expenses</b>	20,504,936	18,796,191	22,968,816	(4,172,625)	-22.20%
<b>Surplus/(Deficit)</b>	<b>\$ 1</b>	<b>\$ 1</b>	<b>\$ (2,912,470)</b>		
<b>Costs per 1000 Gallons</b>	\$ 3.11		\$ 4.04		
<b>Operating and DS</b>	\$ 6.05		\$ 6.84		
<b>Thousand Gallons Treated</b>	3,390,400	3,107,867	3,356,927	249,060	8.01%
<b>or</b>					
<b>Flow (MGD)</b>	9.289		9.991		

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

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

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$ 521,916	\$ 478,423	\$ 478,423	\$ -	0.00%
Interest Allocation	1,700	1,558	4,130	2,572	165.04%
<b>Total Operating Revenues</b>	<b>\$ 523,616</b>	<b>\$ 479,981</b>	<b>\$ 482,553</b>	<b>\$ 2,572</b>	<b>0.54%</b>

**Expenses**

Personnel Cost	\$ 127,879	\$ 117,222	\$ 123,700	\$ (6,478)	-5.53%
Professional Services	25,000	22,917	14,830	8,087	35.29%
Other Services & Charges	35,400	32,450	42,532	(10,082)	-31.07%
Communications	3,450	3,163	10,947	(7,785)	-246.16%
Information Technology	13,000	11,917	19,185	(7,268)	-60.99%
Supplies	-	-	37	(37)	
Operations & Maintenance	143,550	131,588	121,687	9,900	7.52%
Equipment Purchases	3,800	3,483	3,483	(0)	0.00%
Depreciation	25,000	22,917	22,917	0	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 377,079</b>	<b>\$ 345,655</b>	<b>\$ 359,318</b>	<b>\$ (13,662)</b>	<b>-3.95%</b>
Allocation of Support Departments	146,534	134,323	128,629	5,695	4.24%
<b>Total Operating Expenses</b>	<b>\$ 523,613</b>	<b>\$ 479,979</b>	<b>\$ 487,946</b>	<b>\$ (7,968)</b>	<b>-1.66%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ 3</b>	<b>\$ 3</b>	<b>\$ (5,393)</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 22,680	\$ 20,790	\$ 20,790	\$ -	0.00%
Trust Fund Interest	200	183	410	227	123.85%
Reserve Fund Interest	-	-	-	-	
<b>Total Debt Service Revenues</b>	<b>\$ 22,880</b>	<b>\$ 20,973</b>	<b>\$ 21,200</b>	<b>\$ 227</b>	<b>1.08%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 18,729	\$ 17,168	\$ 17,168	\$ -	0.00%
Estimated New Principal & Interest	4,150	3,804	3,804	-	0.00%
Reserve Additions-Interest	-	-	-	-	
<b>Total Debt Service Costs</b>	<b>\$ 22,879</b>	<b>\$ 20,972</b>	<b>\$ 20,972</b>	<b>\$ -</b>	<b>0.00%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ 1</b>	<b>\$ 1</b>	<b>\$ 228</b>		

<b>Rate Center Summary</b>					
<b>Total Revenues</b>	\$ 546,496	\$ 500,955	\$ 503,754	\$ 2,799	0.56%
<b>Total Expenses</b>	546,492	500,951	508,919	(7,968)	-1.59%
<b>Surplus/(Deficit)</b>	<b>\$ 4</b>	<b>\$ 4</b>	<b>\$ (5,165)</b>		
<b>Costs per 1000 Gallons</b>	\$ 12.65		\$ 10.85		
<b>Operating and DS</b>	\$ 13.20		\$ 11.32		
<b>Thousand Gallons Treated or Flow (MGD)</b>	41,401	37,951	44,970	7,019	<b>18.50%</b>
	0.113		0.134		

Rivanna Water & Sewer Authority  
Monthly Financial Statements - May 2024

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

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Operations Rate Revenue	\$ 384,192	\$ 352,176	\$ 352,176	\$ -	0.00%
Interest Allocation	1,300	1,192	3,344	2,152	180.58%
<b>Total Operating Revenues</b>	<b>\$ 385,492</b>	<b>\$ 353,368</b>	<b>\$ 355,520</b>	<b>\$ 2,152</b>	<b>0.61%</b>

**Expenses**

Personnel Cost	\$ 127,949	\$ 117,286	\$ 123,700	\$ (6,414)	-5.47%
Professional Services	5,000	4,583	36	4,547	99.21%
Other Services & Charges	24,800	22,733	31,640	(8,907)	-39.18%
Communications	3,800	3,483	6,043	(2,560)	-73.49%
Information Technology	14,025	12,856	6,639	6,218	48.36%
Supplies	-	-	616	(616)	
Operations & Maintenance	49,500	45,375	37,061	8,314	18.32%
Equipment Purchases	3,700	3,392	3,392	0	0.00%
Depreciation	20,000	18,333	18,333	(0)	0.00%
<b>Subtotal Before Allocations</b>	<b>\$ 248,774</b>	<b>\$ 228,042</b>	<b>\$ 227,461</b>	<b>\$ 582</b>	<b>0.26%</b>
Allocation of Support Departments	136,722	125,328	119,857	5,471	4.37%
<b>Total Operating Expenses</b>	<b>\$ 385,495</b>	<b>\$ 353,371</b>	<b>\$ 347,318</b>	<b>\$ 6,052</b>	<b>1.71%</b>
<b>Operating Surplus/(Deficit)</b>	<b>\$ (3)</b>	<b>\$ (3)</b>	<b>\$ 8,201</b>		

**Debt Service Budget vs. Actual**

**Revenues**

Debt Service Rate Revenue	\$ 18,636	\$ 17,083	\$ 17,083	\$ -	0.00%
Trust Fund Interest	80	73	171	98	133.17%
Reserve Fund Interest	1,800	1,650	2,811	1,161	70.35%
<b>Total Debt Service Revenues</b>	<b>\$ 20,516</b>	<b>\$ 18,806</b>	<b>\$ 20,065</b>	<b>\$ 1,258</b>	<b>6.69%</b>

**Debt Service Costs**

Total Principal & Interest	\$ 7,471	\$ 6,848	\$ 6,848	\$ -	0.00%
Reserve Additions-Interest	1,800	1,650	2,811	(1,161)	-70.35%
Estimated New Principal & Interest	11,250	10,313	10,313	-	0.00%
<b>Total Debt Service Costs</b>	<b>\$ 20,521</b>	<b>\$ 18,811</b>	<b>\$ 19,972</b>	<b>\$ (1,161)</b>	<b>-6.17%</b>
<b>Debt Service Surplus/(Deficit)</b>	<b>\$ (5)</b>	<b>\$ (5)</b>	<b>\$ 93</b>		

Rate Center Summary					
<b>Total Revenues</b>	\$ 406,008	\$ 372,174	\$ 375,584	\$ 3,410	0.92%
<b>Total Expenses</b>	406,016	372,181	367,290	4,892	1.31%
<b>Surplus/(Deficit)</b>	<b>\$ (8)</b>	<b>\$ (7)</b>	<b>\$ 8,295</b>		
<b>Costs per 1000 Gallons</b>	\$ 16.30		\$ 15.53		
<b>Operating and DS</b>	\$ 17.17		\$ 16.43		
<b>Thousand Gallons Treated</b>	23,643	21,673	22,361	688	<b>3.18%</b>
<b>or</b>					
<b>Flow (MGD)</b>	0.065		0.067		

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

**Administration**

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Payment for Services SWA	\$ 781,000	\$ 715,917	\$ 715,917	\$ 0	0.00%
Bond Proceeds Funding Bond Issuance Costs	-	-	-	-	
Miscellaneous Revenue	-	-	6,885	6,885	
<b>Total Operating Revenues</b>	<b>\$ 781,000</b>	<b>\$ 715,917</b>	<b>\$ 722,801</b>	<b>\$ 6,885</b>	<b>0.96%</b>

**Expenses**

Personnel Cost	\$ 2,930,008	\$ 2,685,841	\$ 2,581,869	\$ 103,972	3.87%
Professional Services	F 136,450	125,079	134,629	(9,549)	-7.63%
Other Services & Charges	140,760	129,030	112,383	16,647	12.90%
Communications	E 42,800	39,233	71,883	(32,650)	-83.22%
Information Technology	778,800	713,900	679,196	34,704	4.86%
Supplies	22,800	20,900	20,991	(91)	-0.44%
Operations & Maintenance	64,200	58,850	52,450	6,400	10.88%
Equipment Purchases	15,000	13,750	13,839	(89)	-0.65%
Depreciation	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ 4,130,818</b>	<b>\$ 3,786,583</b>	<b>\$ 3,667,241</b>	<b>\$ 119,343</b>	<b>3.15%</b>

**Department Summary**

<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (3,349,818)</b>	<b>\$ (3,070,667)</b>	<b>\$ (2,944,439)</b>	<b>\$ (126,228)</b>	<b>4.11%</b>
<b>Allocations to the Rate Centers</b>						
Urban Water	44.00%	\$ 1,473,920	\$ 1,351,093	\$ 1,295,553	\$ 55,540	
Crozet Water	4.00%	\$ 133,993	122,827	117,778	5,049	
Scottsville Water	2.00%	\$ 66,996	61,413	58,889	2,525	
Urban Wastewater	48.00%	\$ 1,607,913	1,473,920	1,413,331	60,589	
Glenmore Wastewater	1.00%	\$ 33,498	30,707	29,444	1,262	
Scottsville Wastewater	1.00%	\$ 33,498	30,707	29,444	1,262	
	100.00%	<b>\$ 3,349,818</b>	<b>\$ 3,070,667</b>	<b>\$ 2,944,439</b>	<b>\$ 126,228</b>	



Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

**Maintenance**

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Payment for Services SWA	\$ -	\$ -	\$ -	\$ -	-
Miscellaneous Revenue	-	-	1,067	1,067	
<b>Total Operating Revenues</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,067</b>	<b>\$ 1,067</b>	

**Expenses**

Personnel Cost	B	\$ 1,553,212	\$ 1,423,777	\$ 1,481,600	\$ (57,823)	-4.06%
Professional Services		25,000	22,917	-	22,917	100.00%
Other Services & Charges		36,400	33,367	19,380	13,987	41.92%
Communications		11,300	10,358	19,152	(8,794)	-84.90%
Information Technology		17,500	16,042	9,551	6,490	40.46%
Supplies		4,000	3,667	22	3,644	99.39%
Operations & Maintenance		114,150	104,638	106,456	(1,818)	-1.74%
Equipment Purchases		201,000	184,250	119,167	65,083	35.32%
Depreciation		-	-	-	-	
<b>Total Operating Expenses</b>		<b>\$ 1,962,562</b>	<b>\$ 1,799,015</b>	<b>\$ 1,755,328</b>	<b>\$ 43,686</b>	<b>2.43%</b>

Department Summary						
<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (1,962,562)</b>	<b>\$ (1,799,015)</b>	<b>\$ (1,754,261)</b>	<b>\$ (42,619)</b>	<b>2.37%</b>
<b>Allocations to the Rate Centers</b>						
Urban Water	30.00%	\$ 588,768	\$ 539,704	\$ 526,278	\$ 13,426	
Crozet Water	3.50%	68,690	62,966	61,399	1,566	
Scottsville Water	3.50%	68,690	62,966	61,399	1,566	
Urban Wastewater	56.50%	1,108,847	1,016,443	991,157	25,286	
Glenmore Wastewater	3.50%	68,690	62,966	61,399	1,566	
Scottsville Wastewater	3.00%	58,877	53,970	52,628	1,343	
	100.00%	<b>\$ 1,962,562</b>	<b>\$ 1,799,015</b>	<b>\$ 1,754,261</b>	<b>\$ 44,754</b>	

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

**Laboratory**

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

**Operating Budget vs. Actual**

Notes

**Revenues**

N/A

**Expenses**

Personnel Cost	\$ 456,056	\$ 418,051	\$ 403,632	\$ 14,419	3.45%
Professional Services	-	-	450	(450)	
Other Services & Charges	14,580	13,365	9,816	3,549	26.56%
Communications	1,400	1,283	644	640	49.86%
Information Technology	1,000	917	6,475	(5,558)	-606.36%
Supplies	1,200	1,100	2,428	(1,328)	-120.71%
Operations & Maintenance	115,300	105,692	81,291	24,401	23.09%
Equipment Purchases	1,700	1,558	1,666	(108)	-6.90%
Depreciation	-	-	-	-	
<b>Total Operating Expenses</b>	<b>\$ 591,236</b>	<b>\$ 541,966</b>	<b>\$ 506,401</b>	<b>\$ 35,565</b>	<b>6.56%</b>

**Department Summary**

<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (591,236)</b>	<b>\$ (541,966)</b>	<b>\$ (506,401)</b>	<b>\$ (35,565)</b>	<b>6.56%</b>
<b>Allocations to the Rate Centers</b>						
Urban Water	44.00%	\$ 260,144	\$ 238,465	\$ 222,816	\$ 15,649	
Crozet Water	4.00%	23,649	21,679	20,256	1,423	
Scottsville Water	2.00%	11,825	10,839	10,128	711	
Urban Wastewater	47.00%	277,881	254,724	238,008	16,716	
Glenmore Wastewater	1.50%	8,869	8,129	7,596	533	
Scottsville Wastewater	1.50%	8,869	8,129	7,596	533	
	100.00%	\$ 591,236	\$ 541,966	\$ 506,401	\$ 35,565	

Rivanna Water & Sewer Authority  
 Monthly Financial Statements - May 2024

**Engineering**

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

**Operating Budget vs. Actual**

Notes

**Revenues**

Payment for Services SWA	\$	-	\$	-	\$	8,695	\$	8,695
<b>Total Operating Revenues</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>-</b>	<b>\$</b>	<b>8,695</b>	<b>\$</b>	<b>8,695</b>

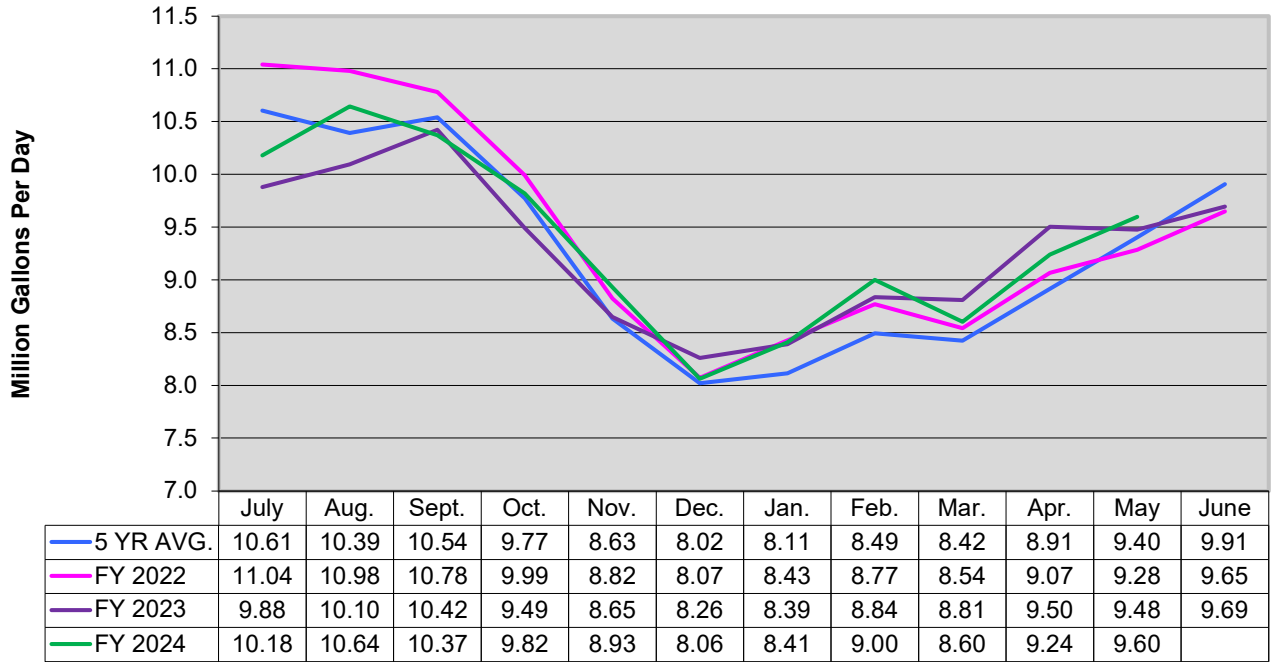
**Expenses**

Personnel Cost	\$	2,022,024	\$	1,853,522	\$	1,774,837	\$	78,685	4.25%
Professional Services		30,000		27,500		6,406		21,094	76.70%
Other Services & Charges		22,000		20,167		16,948		3,218	15.96%
Communications		19,540		17,912		13,762		4,150	23.17%
Information Technology		154,900		141,992		132,785		9,207	6.48%
Supplies		8,500		7,792		4,917		2,875	36.90%
Operations & Maintenance		86,740		79,512		51,942		27,570	34.67%
Equipment Purchases		21,500		19,708		19,708		0	0.00%
Depreciation		-		-		-		-	
<b>Total Operating Expenses</b>	<b>\$</b>	<b>2,365,204</b>	<b>\$</b>	<b>2,168,104</b>	<b>\$</b>	<b>2,021,305</b>	<b>\$</b>	<b>146,799</b>	<b>6.77%</b>

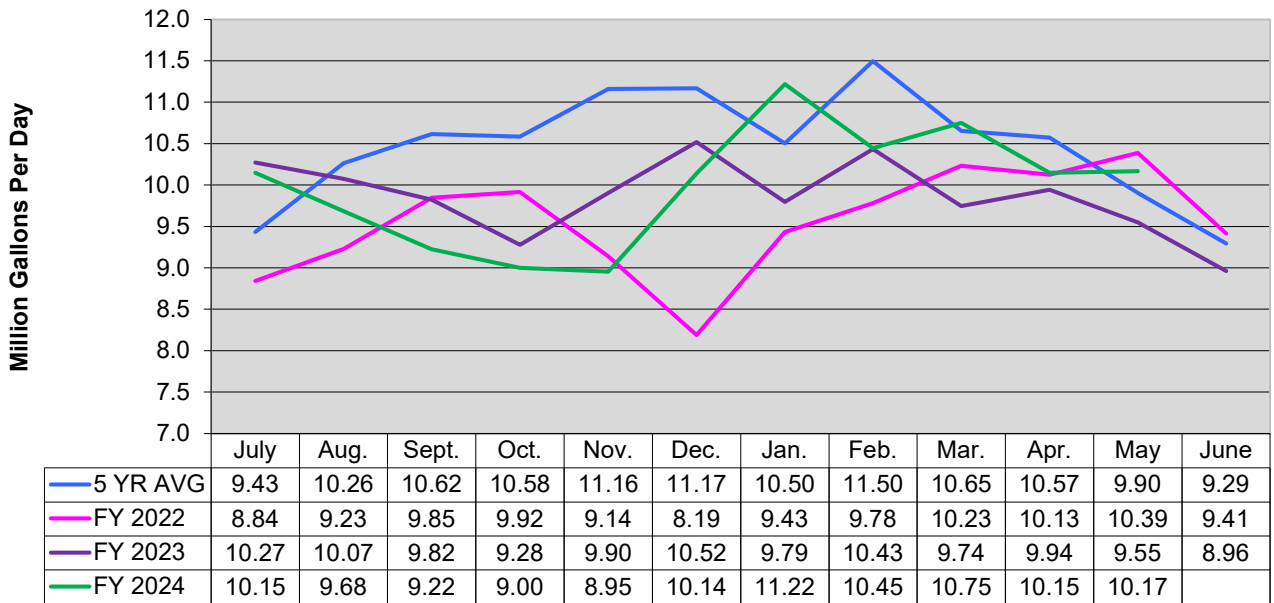
Department Summary						
<b>Net Costs Allocable to Rate Centers</b>		<b>\$ (2,365,204)</b>	<b>\$ (2,168,104)</b>	<b>\$ (2,012,610)</b>	<b>\$ (138,104)</b>	<b>6.37%</b>
<b>Allocations to the Rate Centers</b>						
Urban Water	47.00%	\$ 1,111,646	\$ 1,019,009	\$ 945,927	\$ 73,082	
Crozet Water	4.00%	94,608	86,724	80,504	6,220	
Scottsville Water	2.00%	47,304	43,362	40,252	3,110	
Urban Wastewater	44.00%	1,040,690	953,966	885,549	68,417	
Glenmore Wastewater	1.50%	35,478	32,522	30,189	2,332	
Scottsville Wastewater	1.50%	35,478	32,522	30,189	2,332	
100.00%		\$ 2,365,204	\$ 2,168,104	\$ 2,012,610	\$ 155,494	

**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 JUNE 2024**

**DATE: JULY 23, 2024**

**WATER OPERATIONS:**

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

<i>Water Treatment Plant</i>	<i>Average Daily Production (MGD)</i>	<i>Maximum Daily Production in the Month (MGD)</i>
South Rivanna	9.48	10.95 (6/25/2024)
Observatory	0.86	1.48 (6/20/2024)
North Rivanna	<u>0.56</u>	<u>0.65 (6/24/2024)</u>
<b><i>Urban Total</i></b>	10.92	12.66 (6/24/2024)
Crozet	0.74	0.99 (6/24/2024)
Scottsville	0.05	0.078 (6/23/2024)
Red Hill	<u>0.0026</u>	0.005 (6/3/2024)
<b><i>RWSA Total</i></b>	11.71	-

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

**Status of Reservoirs (as of July 17, 2024):**

- Urban Reservoirs are 94% of Total Useable Capacity
  - South Rivanna Reservoir is 93% full
  - Ragged Mountain Reservoir is 94 % full
  - Sugar Hollow Reservoir is 96% full
- Beaver Creek Reservoir (Crozet) is 95% full
- Totier Creek Reservoir (Scottsville) is full

**WASTEWATER OPERATIONS:**

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

<b>WRRF</b>	<b>Average Daily Effluent Flow (MGD)</b>	<b>Average CBOD<sub>5</sub> (ppm)</b>		<b>Average Total Suspended Solids (ppm)</b>		<b>Average Ammonia (ppm)</b>	
		<b>RESULT</b>	<b>LIMIT</b>	<b>RESULT</b>	<b>LIMIT</b>	<b>RESULT</b>	<b>LIMIT</b>
<b>Moore's Creek</b>	8.6	<QL	9	<QL	22	<QL	2.2
<b>Glenmore</b>	0.122	1.5	15	3.4	30	NR	NL
<b>Scottsville</b>	0.049	0.50	25	6.7	30	NR	NL
<b>Stone Robinson</b>	0.0005	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 Moore's Creek AWRRF were as follows for June 2024.

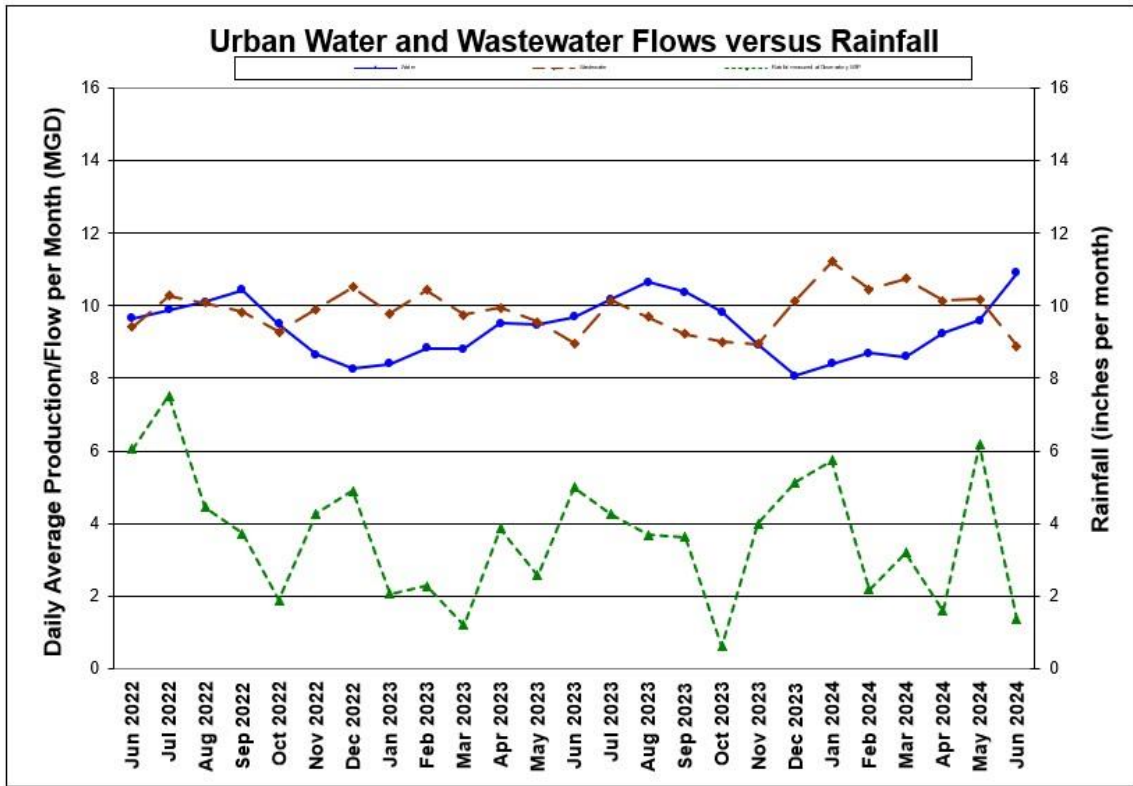
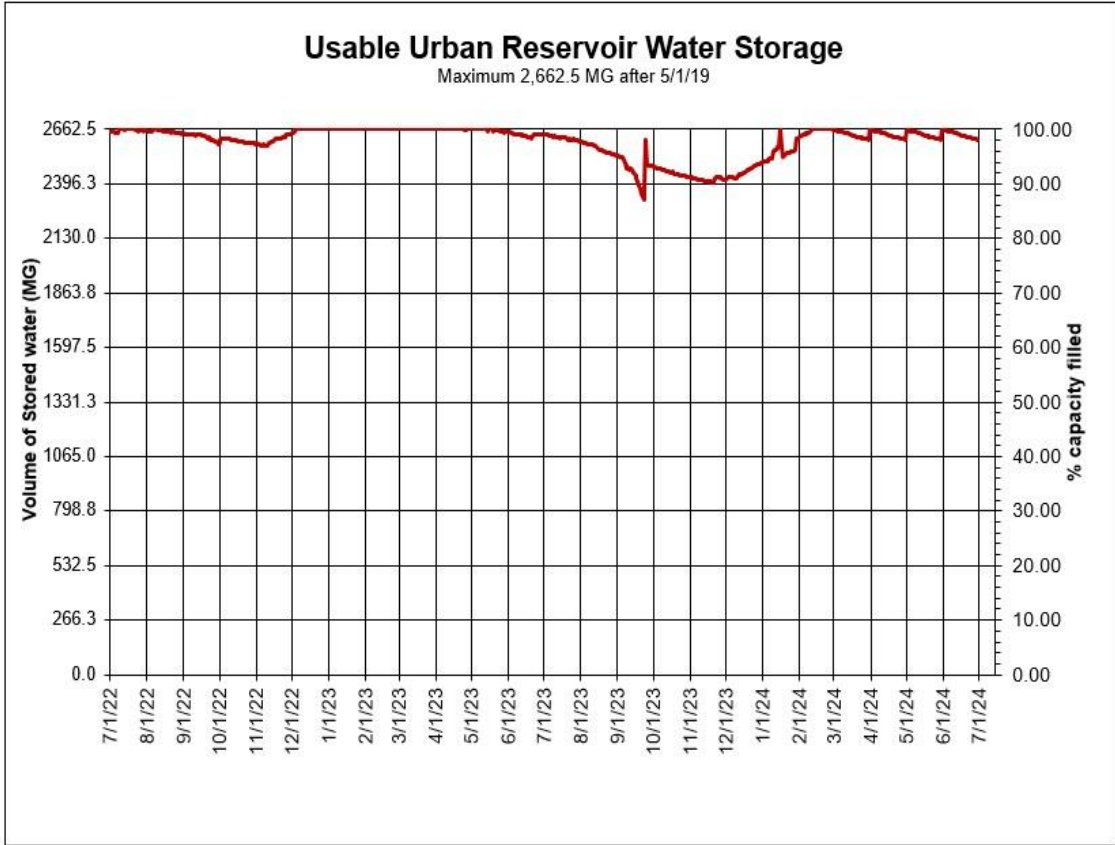
<b>State Annual Allocation (lb./yr.) Permit</b>	<b>Average Monthly Allocation (lb./mo.) *</b>	<b>Moore's Creek Discharge June (lb./mo.)</b>	<b>Performance as % of monthly average Allocation*</b>	<b>Year to Date Performance as % of annual allocation</b>
<b>Nitrogen</b>	282,994	23,583	33%	20%
<b>Phosphorous</b>	18,525	1,636	29%	9%

\*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: JULY 23, 2024**

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

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

### Summary

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



Under Construction

- 1. MC 5kV Electrical System Upgrades
- 2. Rivanna Pump Station Restoration
- 3. Red Hill Water Treatment Plant Upgrades

Design and Bidding

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

Planning and Studies

- 17. MCAWRRF Biogas Upgrades
- 18. Flood Protection Resiliency Study

Other Significant Projects

- 19. Urgent and Emergency Repairs
- 20. Security Enhancements

**Under Construction**

**1. MCAWRRF 5kV Electrical System Upgrades**

Design Engineer:	Hazen and Sawyer (Hazen)
Construction Contractor:	Pyramid Electrical Contractors (Richmond, VA)
Construction Start:	May 2022
Percent Complete:	62%
Base Construction Contract + Change Order to Date = Current Value:	\$5,180,000 - \$800,127 = \$4,379,873
Completion:	December 2024
Budget:	\$5,635,000

Current Status: The third (of 5) motor control center replacement is underway. The Contractor is wiring the new switchgear facility and beginning the commissioning process. 5kV cable replacement will start soon. The Contractor continues to remedy the situation associated with the damaged primary clarifiers, caused by improper wiring of a new Motor Control Center.

**2. Rivanna Pump Station Restoration**

Design Engineer:	Hazen/SEH
Construction Contractor:	MEB
Construction Start:	July 2024
Project Status:	Design & Material Acquisition
Completion:	January 2025
Budget:	\$21,750,000

Current Status: June workshops to decide on resiliency of components to be replaced/repaired as well as modifications and improvements to the pump stations have been completed. Two workshops were held in July to review and make modifications to the station controls and programming. A term contract is being finalized with MEB General Contractors to utilize their services throughout the station re-construction. Completion dates referenced in this section reflect when we anticipate the pump station will be taken off bypass (January 2025) and when the full restoration will be completed (June 2025).

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

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Anderson Construction (Lynchburg)
Construction Start:	September 2024
Percent Complete:	Awarded, 0%
Base Construction Contract + Change Order to Date = Current Value:	\$1,742,375
Completion:	March 2026
Budget:	\$2,050,000

Current Status: Construction contract documents are being reviewed for processing. Conformed documents are being generated for resubmission and approval by the County based on changes made during negotiations post-bid. This project received partial grant funding from Albemarle County.

**Design and Bidding**

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

Design Engineer:	Kimley-Horn
Project Start:	August 2018
Project Status:	99% Design
Construction Start:	January 2025
Completion:	June 2029
Budget:	\$46,000,000

Current Status: Final design continues in preparation for bidding next month. Staff continue to work with UVA on the final easement.

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

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

Current Status: A Value Engineering workshop was completed. 90% design documents are anticipated in August.

**6. MCAWRRF Structural and Concrete Rehabilitation**

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	April 2023
Project Status:	80% Design
Construction Start:	February 2025
Completion:	May 2027
Budget:	\$11,300,000

Current Status: 90% design documents will be completed in July.

**7. Crozet Pump Stations Rehabilitation**

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

Current Status: Wiley | Wilson incorporated accepted recommendations from the value engineering workshop into the 90% design documents. A 90% design workshop was held with staff in July.

**8. South Fork Rivanna River Crossing**

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2020
Project Status:	99% Design
Construction Start:	April 2025
Completion:	January 2027
Budget:	\$7,300,000

Current Status: All easements have been acquired, and the Water Protection permit was resubmitted to the County for approval. The VDOT Land Use permit was submitted in May.

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

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

Current Status: A revised concept design to incorporate the expanded ~1,500 sq ft exhibit space has been completed. A design kickoff for the exhibit space was completed in July while efforts continue to bring the revised project to 60% design.

**10. Central Water Line**

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

Current Status: The acquisition process for two private easements has been initiated with our real estate consultant. RWSA is negotiating the third easement with UVA along Hereford Drive. Railroad permits were submitted in February 2024 and draft Agreements from both railroads have been received and are being reviewed. Additional design work associated with a partial reroute of the water line in the East High Street area is necessary as there was not enough subsurface space to install this large 24" water pipe in the intended E. High St. location. Redesign efforts are in process and public outreach efforts to the impacted neighborhoods (Woolen Mills, Martha Jefferson, Belmont-Carlton, and Little High) are in progress.

**11. Crozet GAC Expansion – Phase I**

Design Engineer:	SEH
Project Start:	July 2023
Project Status:	30% Design
Construction Start:	August 2025
Completion:	March 2027
Budget:	\$6,550,000

Current Status: Final PER has been completed and submitted to VDH for review. Detailed design began with a 30% submittal in July. \$6.24 M in grant funds from VDH have been awarded for this project.

**12. RMR Pool Raise**

Design Engineer:	Schnabel
Project Start:	April 2024

Project Status:	15% Design
Construction Start:	October 2025
Completion:	September 2026
Budget:	\$5,000,000

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

**13. SFRR to RMR Pipeline, Intake, and Facilities**

Design Engineer:	Kimley Horn/SEH
Project Start:	July 2023
Project Status:	35% Design
Construction Start:	March 2026
Completion:	December 2030
Budget:	\$79,000,000

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

**14. 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:	40% Design
Construction Start:	May 2026
Completion:	January 2030
Budget:	\$47,100,000

Current Status: Design work is underway by Hazen for the new raw water pump station, intake, raw water main, and hypolimnetic oxygenation system, and by Schnabel Engineering for final design of the dam spillway upgrades, temporary detour, and spillway bridge. Geological, survey, and other field investigative work for the dam design are underway. Documents are being developed for acquisition or lease of property for the Pump Station from the County.

**15. Upper Schenks Branch Interceptor, Phase II**

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

Current Status: The design team has provided additional information to assist the County with

easement acquisition considerations.

## **16. MC Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades**

Design Engineer:	Hazen and Sawyer (Hazen)
Project Start:	June 2023
Project Status:	50% Design
Construction Start:	June 2025
Completion:	September 2026
Budget:	\$3,600,000

Current Status: The 50% design submittal was received this month and is under review by staff. As a result of the preliminary design process, additional improvements to the current septage receiving equipment and billing software are being added to the project and an additional evaluation of flood resiliency efforts is warranted. A separate Board memo is included this month for this additional design work.

## **Planning and Studies**

### **17. MCAWRRF Biogas Upgrades**

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

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

### **18. Flood Protection Resiliency Study**

Design Engineer:	TBD
Project Start:	August 2024
Project Status:	Preliminary Engineering/Study
Completion:	July 2025
Budget:	\$278,500

Current Status: This project will identify individualized flood mitigation measures of six facilities to increase their resiliency from a 1% flooding event to a 0.2% flooding event. Facilities include: Mechums River Raw Water PS, Glenmore WW PS, Moores Creek AWRRF, Scottsville WWRRF, Crozet FET, and Crozet WW PS #2. This project received \$198,930 in grant funding from FEMA and VDEM.

## Other Significant Projects

### 19. Urgent and Emergency Repairs

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

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

- RWSA Finished Water ARV Repairs: RWSA Engineering staff recently met with Maintenance staff to identify a list of Air Release Valves (ARVs) that need to be repaired, replaced, or abandoned. Several of these locations will require assistance from RWSA On-Call Maintenance Contractors, due to the complexity of the sites (proximity to roadways, depth, etc.). The initial round will include seven (7) sites, all along the South Rivanna Waterline. Three replacements have been completed at this time.
- MCAWRRF Secondary Clarifier #4 Equipment Failure: On Sunday Evening, March 3<sup>rd</sup>, RWSA Wastewater Department staff identified that Secondary Clarifier #4 at MCAWRRF appeared to have a significant mechanical malfunction. Upon further review by staff, the rotating arm of the clarifier mechanism caught the stationary arm, wrapping it around the center of the clarifier. Staff mobilized MEB General Contractors under its On-Call Maintenance Construction Services Contract with Faulconer, and the clarifier was back up and operational with just one stationary arm on Friday, March 8<sup>th</sup>. Staff are waiting on the necessary parts to complete repairs to the clarifier arms, but in the meantime, the clarifier is operational should it be needed for wet weather events. The remaining repairs will be completed by the RWSA Maintenance Department.

### 20. Security Enhancements

Design Engineer:	Hazen & Sawyer
Construction Contractor:	Security 101 (Richmond, VA)
Construction Start:	March 2020
Percent Complete:	85% (WA9), 85% (WA10)
Based Construction Contract +	
Change Orders to Date = Current Value:	\$718,428 (WA1) + \$834,742 (WA2-10)
Completion:	June 2024 (WA9), August 2024 (WA10)
Budget:	\$2,810,000

Current Status: WA9 will include installation of card access on all exterior doors at the South Rivanna WTP. WA10 will include installation of card access on the exterior doors of the finished water pump station and “795” tank buildings in Scottsville. Device installation is complete here as well, with only startup and programming remaining. Design of MCAWRRF entrance modifications with Hazen & Sawyer continues, with discussions with Dominion Energy also ongoing, as relocation of existing electrical infrastructure will be required. This relocation process will need to be finalized prior to the project proceeding to the bidding phase. Relocation of existing electrical infrastructure will require coordination with the adjacent landowner, as the infrastructure must be completely relocated from the entrance area. As these discussions are ongoing, staff have submitted appropriate permitting documents to Albemarle County.



## MEMORANDUM

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

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

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

**SUBJECT: ADMINISTRATION AND COMMUNICATIONS REPORT**

**DATE: JULY 23, 2024**

### Human Resources

Annual turnover for the Rivanna Water and Sewer Authority, for the fiscal year ending on June 30, 2024, is 14.0%.

We welcomed a new Water Operator Trainee, Katelin Shifflett. We are happy to have her join our team.

We have chosen the firm “PoliHire”, out of Washington, D.C., to help us recruit for our new Deputy Executive Director position.

We have issued a Request for Quote for the completion of a Compensation and Classification Study. We expect to complete the study by the end of the calendar year.

### Safety

Our Safety Manager attended the Virginia Section of the American Water Works Association/Virginia Water Environment Association’s joint safety seminar at the Western Virginia Water Authority.

Our Safety Committee met on June 20, 2024, and planned activities for the rest of the calendar year.

### Community Outreach

We are excited to have welcomed a group of campers from the University of Virginia Equity Center’s Starr Hill Pathways summer program to 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. The tours were led by Daniel Campbell, Cary Wingo and Travis Granger, all of whom shared their experiences working for the Rivanna Water & Sewer Authority and how they chose to come here to work.





## 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 JUNE 2024**

**DATE: JULY 23, 2024**

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

	<i>Month</i>	<i>Daily Average</i>	
City Usage (gal)	151,673,634	5,055,788	<b>46.4%</b>
ACSA Usage (gal)	175,194,755	5,839,825	<b>53.6%</b>
<b><i>Total (gal)</i></b>	<b>326,868,389</b>	<b>10,895,613</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 July 2023), and that usage relative to the maximum allocation for each party (6.71 MGD for the City and 11.99 MGD for ACSA). Completed in 2019 for a cost of about \$3.2 M, our Wholesale Metering Program consists of 25 remote meter locations around the City boundary and 3 finished water flow meters at treatment plants.

All of the wholesale meters received an annual recalibration in July 2024.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation

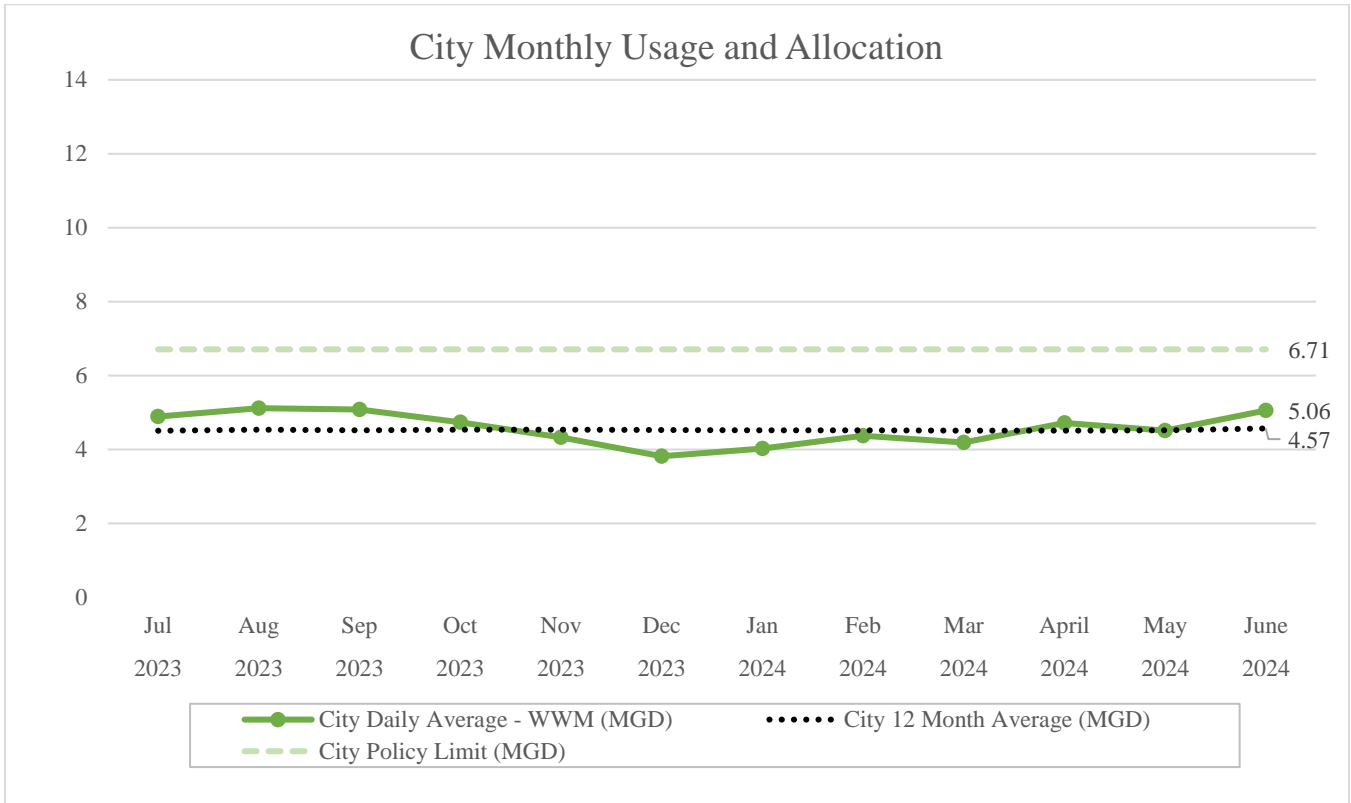
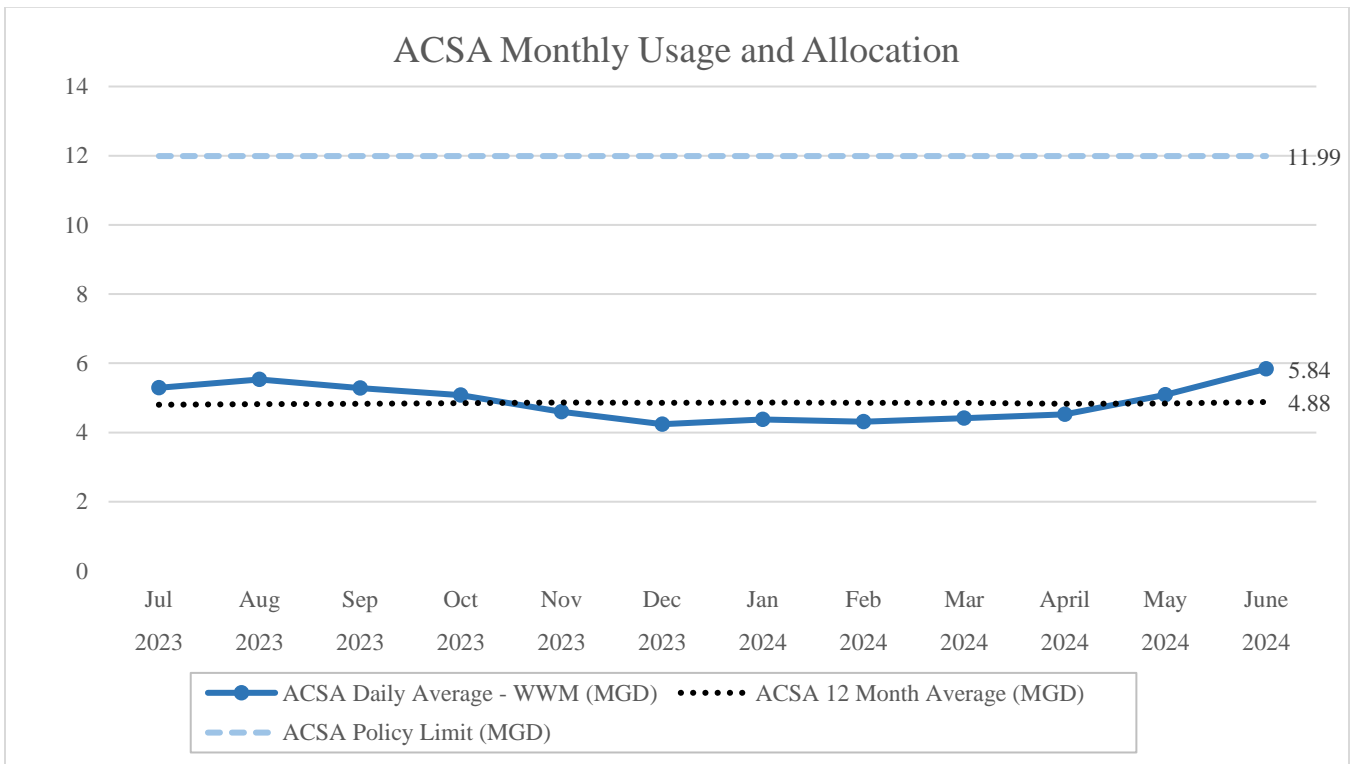
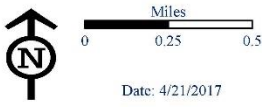


Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation



# Meter Locations for the Wholesale Water Metering Project



695 Moores Creek Lane  
 Charlottesville, VA 22902  
 p.434-977-2970  
[www.rivanna.org](http://www.rivanna.org)  
[www.rivannagis.org](http://www.rivannagis.org)

- |                                      |   |                                   |                             |                       |
|--------------------------------------|---|-----------------------------------|-----------------------------|-----------------------|
| <b>■</b> Meter Site Locations - WWMP | 08, Franklin St / Carlton Ave / Broadway St | 16, Ricky Rd / Barracks Rd        | 23, Greenbrier Dr / Rio Rd  | 30, Darden Towle Park |
| 01, Pepsi Place                      | 09, Moores Creek Ln                         | 17, Ricky Rd (near Wayne Ave)     | 24, Greenbrier Ter          | 31, Stribling Ave     |
| 02, Michael Pl / Wilson Ct           | 11, Avon St                                 | 18, North Berkshire Rd            | 25, University Heights Apts | 32, Fontaine Ave      |
| 03, Wilder Dr                        | 12, Loma Ln / Harris Rd                     | 19, Hydraulic Rd / Ingleswood Dr  | 26, Seminole Trl            |                       |
| 06, Long St / Rver Rd                | 14, Old Lynchburg Rd                        | 20, Trader Joes                   | 28, Rio Rd / Melbourne Rd   |                       |
|                                      | 15, Ivy Rd / Colonnade Dr                   | 22, Rio Rd @ Church of Our Savior | 29, Pen Park Ln             |                       |



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

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

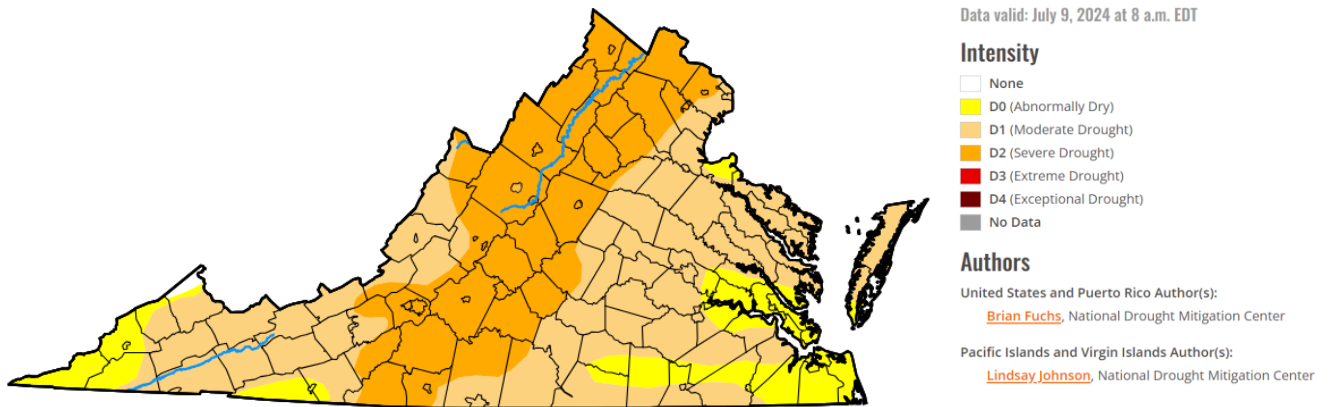
**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: DROUGHT MONITORING REPORT**

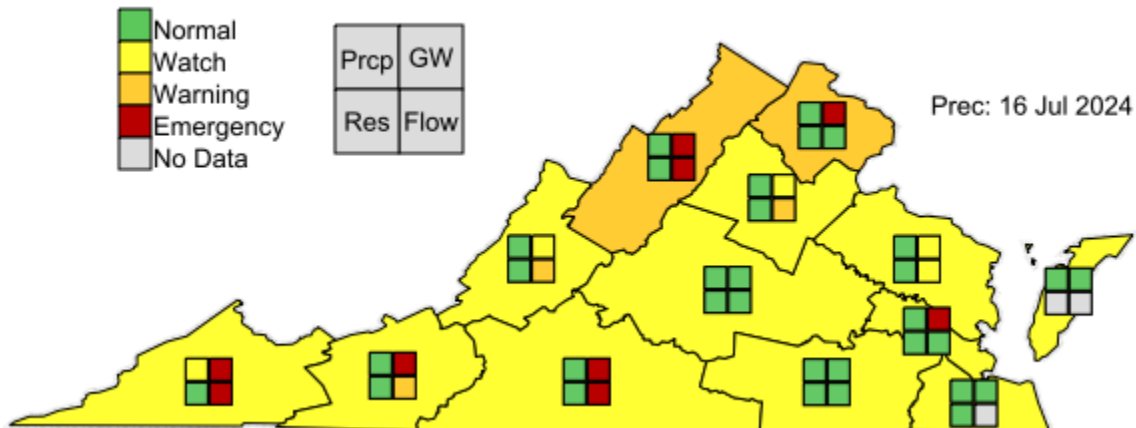
**DATE: JULY 23, 2024**

**State and Federal Drought Monitoring as of July 17, 2024:**

- U.S. Drought Monitoring Report: Indicates Charlottesville and all of Albemarle County are experiencing severe drought conditions.



- VDEQ Drought Status Report: Our region is listed as being in a “Watch” status for drought conditions. All other indicators are normal.



## **Precipitation & Stream Flows**

<b>Charlottesville Precipitation</b>					
Year	Month	Observed (in.)	Normal (in.)	Departure (in.)	Comparison to Normal (%)
2021	Jan - Dec	33.82	41.61	-7.79	-19
2022	Jan - Dec	43.53	41.61	+1.92	+5
2023	Jan - Dec	26.95	41.61	-15.98	-35
2024	Jan - June	16.78	20.88	-4.1	-21.7

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

<b>USGS Stream Gaging Station Near the Urban Area (July 2– July 8)</b>				
Gage Name	Rolling 7-day Avg. Stream Flow		Median Daily Streamflow	
	cfs	mgd	cfs	mgd
Mechums River	12.2	7.9	45	29.1
Moormans River	3.6	2.3	24	15.5
NF Rivanna River	11.7	7.6	38	24.6
SF Rivanna River	17	11	112	72.4

Median daily flow: July 8th for the period of record (approx. 30 - 80 years)

## **Status of Reservoirs as of July 17, 2024**

- Urban Reservoirs are 94 % of Total Useable Capacity
- Beaver Creek Reservoir (Crozet) is 95 % of Total Useable Capacity
- Totier Creek Reservoir (Scottsville) is 100% of Total Useable Capacity

## **Drought History in Central Virginia**

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

## MEMORANDUM

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

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

**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: APPROVAL OF UPDATED PURCHASING MANUAL**

**DATE: JULY 23, 2024**

The Authorities' Purchasing Manual was last updated in June 2020 by the Board. Since that time, several changes have been made to the Virginia Public Procurement Act (VPPA). None of those changes were significant until this past General Assembly session. The changes to the Authorities' manual outlined below are being recommended for approval to be consistent with the VPPA. A summary of the significant changes are as follows:

- Purchasing threshold - the purchasing threshold requiring formal competitive bids or competitive negotiations was increased from \$200,000 to \$300,000 for non-transportation **construction related projects - only**. Goods and non-professional services threshold remains at \$200,000.
- Term contract renewals – term contracts for professional engineering and architectural service can be renewed for three additional one-year terms (a total of 4 years). This is a change from four additional one-year terms (a total of 5 years).
- All formal competitive bids or competitive negotiations must be posted on the Commonwealth of Virginia electronic procurement system (eVA) website. Additionally, an option to submit bids and proposals electronically through the eVA site is now mandated (effective January 1, 2025). This requires the Authority to receive formal bids and proposals two different ways concurrently (in-person and electronically). A new section was included in the manual to document the procedures for accepting procurements to address these new requirements.

### **Other Items**

Since the last adoption of the Authorities Purchasing Manual, several other minor changes were made as needed from the amended code. This includes changing or adding *Code of Virginia* sections to match the current code, and minor clarifications in wording. A few minor changes to the bid bond wording were also made.

The sections describing the competitive bidding and competitive negotiations procurements

explicitly stated that the Executive Director could award all contracts below \$200,000. Everything above that amount had to be approved by affirmative action by the Board of Directors. The delegated amount is being proposed to increase to \$300,000 from \$200,000. This increase also requires an amendment to both Authorities' By-laws and will be presented in a separate agenda item.

**Board Action Requested**

Approve the updated Purchasing Manual effective July 1, 2024.

(as shown in the attached, red-lined version).



## **PURCHASING MANUAL**

**RIVANNA WATER & SEWER AUTHORITY  
AND  
RIVANNA SOLID WASTE AUTHORITY**

Revised and adopted – \_\_\_\_\_



## TABLE OF CONTENTS

I.	Introduction.....	3
II.	Purchasing Staff Organization.....	4
III.	Policy.....	5
IV.	Ethics.....	6
V.	Authorized Methods of Procurement and Thresholds.....	8
VI.	Exemptions to Bidding.....	<a href="#">1140</a>
VII.	Small Purchases.....	<a href="#">1312</a>
VIII.	Request for Proposal – Other than Professional Services.....	<a href="#">1513</a>
IX.	Request for Proposal – Professional Services.....	<a href="#">186</a>
X.	Request for Proposal – Professional Services for Multiple Projects and Multiple Years	<a href="#">2149</a>
<a href="#">XI.</a>	Competitive Sealed Bid .....	<a href="#">2320</a>
<del>XI</del> . <a href="#">XII.</a>	<a href="#">Receiving Solicitations – Methods and Procedures.....</a>	<a href="#">26</a>
<del>XII</del> . <a href="#">XIII.</a>	Prequalification Process for Construction Contracts.....	<a href="#">2823</a>
<del>XIII</del> . <a href="#">XIV.</a>	Bonds.....	<a href="#">3126</a>
<del>XIV</del> . <a href="#">XV.</a>	Withdrawal of Bids.....	<a href="#">3327</a>
<del>XV</del> . <a href="#">XVI.</a>	Sole Source.....	<a href="#">3529</a>
<del>XVI</del> . <a href="#">XVII.</a>	Emergency.....	<a href="#">3630</a>
<del>XVII</del> . <a href="#">XVIII.</a>	Use of State and Other Cooperative Contracts.....	<a href="#">3832</a>
<del>XVIII</del> . <a href="#">XIX.</a>	Purchase Requisition.....	<a href="#">3933</a>
<del>XIX</del> . <a href="#">XX.</a>	Specifications.....	<a href="#">4135</a>
<del>XX</del> . <a href="#">XXI.</a>	Purchase Order.....	<a href="#">4336</a>
<del>XXI</del> . <a href="#">XXII.</a>	Change Order.....	<a href="#">4437</a>
<del>XXII</del> . <a href="#">XXIII.</a>	Procurement Under Assistance Agreements.....	<a href="#">4538</a>
<del>XXIII</del> . <a href="#">XXIV.</a>	Disadvantaged Business Program.....	<a href="#">4639</a>
<del>XXIV</del> . <a href="#">XXV.</a>	Disposal of Surplus Property.....	<a href="#">4942</a>
<del>XXV</del> . <a href="#">XXVI.</a>	Debarment of Prospective Contractors.....	<a href="#">5245</a>
<del>XXVI</del> . <a href="#">XXVII.</a>	Vendor Appeals Procedure.....	<a href="#">5447</a>
<del>XXVII</del> . <a href="#">XXVIII.</a>	Glossary of Commonly Used Terms.....	<a href="#">5548</a>
	<a href="#">Appendix A — PPEA Guidelines</a>	
	Appendix <a href="#">AB</a> Internal Guidelines and Procedures	
	Appendix <a href="#">BC</a> Virginia Public Procurement Act – Unofficial Copy	
	Appendix <a href="#">CD</a> Threshold Guidelines and Related Documents	

## **I. INTRODUCTION**

This Manual has been prepared as a reference and guide for the purchasing policies and procedures adopted by the Rivanna Water & Sewer Authority and the Rivanna Solid Waste Authority (together “Authority”). This Manual is designed to guide all Authority employees involved in some way in the purchasing function in implementing the Authority’s procurement regulations in the acquisition of all goods and services, including construction services to make the policies and procedures clearly understood resulting in a more effective and efficient system.

The requirements of this Manual are intended to assure fair and ethical procurement practices for the cost-effective acquisition of all goods and services, including construction services, and to promote good, continuous relations with suppliers. The Manual is also intended to assure compliance with the Virginia Public Procurement Act, as amended (Virginia Code § [2.2-4300](#) et seq.) and other applicable law. By buying competitively the Authority will obtain maximum value for public funds spent. Nothing in this Manual and no deviation from its guidance by Authority staff is intended to nor shall create rights in any third person, including but not limited to Authority suppliers, contractors, service providers, bidders or proposers.

No person shall purchase or contract for any goods, services, insurance or construction except as provided by this Manual. The Authority shall not be bound by any purchase order or contract made contrary to these procedures. Any person responsible for such purchase shall be held personally liable for such purchase, and, if already paid for out of Authority funds, the amount may be recovered in the name of the Authority.

The Manual shall be subject to the requirements of the Virginia Public Procurement Act as amended. This Manual was adopted with all provisions effective as of July 1, 2013 (Subsequently revised and adopted – October 27, 2015, February 27, 2018, June 23, 2020[BGC1]). To the extent any provision in this Manual is deemed inconsistent with the Code of Virginia, Title 2.2, Chapter 43, the Virginia Public Procurement Act, whether due to amendment of that Chapter or otherwise, then the provisions of that Chapter shall control as to such inconsistency.

## II. PURCHASING STAFF ORGANIZATION

### Executive Director:

- 1) is authorized to enter, administer, terminate, and otherwise manage contracts subject to any approval thresholds that may be established by the Board.
- 2) shall have the sole authority to authorize, in writing, the extension of professional services contracts, per the renewals authorized in the original terms and conditions of the contract and within the limitations specified in law; ~~and,~~
- 3) ~~shall have the sole authority to authorize, in writing, the use of competitive negotiation for construction services as provided by law.~~ [LW2][LW3]

The Executive Director has delegated to the Director of Finance & Information Technology ~~/Administration~~ the role of Purchasing Agent.

### Purchasing Agent:

- 1) manages the purchasing function, with certain exceptions related to capital project contracts as noted below\*;
- 2) helps set policy and supervise all procedures including interpretation of policies and procedures.
- 3) is responsible for procurement of insurance, goods, non-professional services, and non-capital construction services\*;
- 4) supervises all inventories of goods held by the Authority
- 5) assists with the development and enforcement of specifications
- 6) handles the disposal of surplus property;
- 7) enforces the above mentioned policies and procedures; and
- 8) ensures that this Manual maintains conformance with the Code of Virginia and other applicable law and with efficient Authority operations.

The Purchasing Agent has delegated a certain authority and responsibility to the Buyer and, under the Small Purchase Procedure, to the Managers and Directors. The Purchasing Agent monitors all purchasing activity, including that managed by the Executive Director, for compliance with these rules and regulations and applicable laws.

### Accounting Associate:

- 1) Is designated the Authority's Buyer
- 2) following procedures;
- 3) the selection of vendors and ordering (with certain exceptions noted below\*);
- 4) follow through;
- 5) record keeping; and
- 6) verification of coding of purchases.

The Buyer is under the regular supervision of the Purchasing Agent and delegates Buyer functions to staff as appropriate.

*\*Exception: The hiring of legal and other professional services and the procuring of contracts for construction or capital related projects are managed by the Executive Director with the technical assistance of the Purchasing Agent.*

### III. POLICY

Purchasing staff has the responsibility to purchase or contract for all insurance, materials, equipment, professional and non-professional services. The Authority strives to achieve the goal of securing the best value in acquiring materials or services through open and fair competition among vendors. This Manual is intended to assist responsible Authority staff to ensure that all procurements:

- 1) are made in an ethical manner that is impartial and above reproach, with preferential treatment for none;
- 2) are made efficiently and economically through open and fair competition among vendors;
- 3) ensure, at a minimum, that:
  - a) solicitations and contracts are properly advertised, posted and issued;
  - b) the methods of contractor selection and contract type are appropriate to the procurement and represent the Authority's best interest;
  - c) bonding and security are obtained when appropriate;
  - d) contractors have the necessary insurance to protect the Authority's interests;
  - e) liquidated damages, when appropriate, are included in contracts;
  - f) contractors perform in accordance with the terms and conditions of their contracts; and
  - g) payments are made only for goods and services, including construction services, received and authorized in the contract.
- 4) are made only to contractors selected in accordance with the stated evaluation criteria;
- 5) are made without restrictive specifications that limit or inhibit full and open competition;
- 6) are made on a sole-source or limited competition basis only after justification in writing and public posting as required;
- 7) include reasonable efforts to increase the opportunity for participation by business enterprises eligible under the Authority's Disadvantaged Business Enterprise Program;
- 8) are approved at the proper level; and
- 9) have approved funding.

It is the Policy of the Authority that in the solicitation or awarding of contracts, no one shall discriminate against a bidder or offeror because of race, religion, color, sex, sexual orientation, gender identity, national origin, age, disability, status as a service disabled veteran, or any other basis prohibited by state law relating to discrimination in employment.

#### IV. ETHICS

The Authority recognizes its special responsibilities under the Code of Virginia and incorporates Article Six, "Ethics in Public Contracting," of the Virginia Public Procurement Act, Article 6, Virginia Code § [2.2-4367](#) et seq., Virginia State and Local Government Conflict of Interests Act, Va. Code § [2.2-3100](#) et seq., Virginia Governmental Frauds Act § [18.2-498.1](#) et seq., and Articles 2 (§ [18.2-438](#) et seq.) and 3 (§ [18.2-446](#) et seq.) of Chapter 10 of Title 18.2 into its Policies and Procedures. The Standards of Conduct section of the Authority Personnel Manual are also part of the behavior requirements.

The following rules should guide Authority employees involved in the procurement process:

- 1) All employees having official responsibility in the procurement process are subject to and should become familiar with its provisions.
- 2) Definitions:
  - a) "Official responsibility" means administrative or operating authority, whether intermediate or final, to initiate, approve, disapprove or otherwise affect a procurement transaction, or any claim resulting therefrom.
  - b) "Procurement transaction" means all functions that pertain to the obtaining of any goods, services or construction, including description of requirements, selection and solicitation of sources, preparation and award of contract and all phases of contract administration.
  - c) "Immediate family" shall mean a spouse, children, parents, brothers and sisters, and any other person living in the same household as the employee.
  - d) "Public employee" shall mean any person employed by a public body, including elected officials or appointed members of governing bodies.
- 3) No employee having official responsibility for a procurement transaction shall participate in that transaction on behalf of the Authority when that employee knows that:
  - a) the employee is contemporaneously employed by a bidder, offeror or contractor involved in the procurement transaction;
  - b) the employee, the employee's partner, or any member of the employee's immediate family holds a position with a bidder, offeror or contractor such as an officer, director, trustee, partner or the like, or is employed in a capacity involving personal and substantial participation in the procurement transaction, or owns or controls an interest of more than five (5) percent;
  - c) the employee, the employee's partner or any member of the employee's immediate family has a pecuniary interest arising from the procurement transaction; or
  - d) the employee, the employee's partner or any member of the employee's immediate family is negotiating, or has an arrangement concerning, prospective employment with a bidder, offeror or contractor.
- 4) Vendor contacts should be limited to the purpose of obtaining information related to an actual Authority purchase.

- 5) No employee will accept any gifts, meals, or free trips prior to the awarding of a purchase contract or subsequent to award of a contract except as may be provided for as a part of the contract.
  - a) Should any bid, proposal or contract require travel outside the Authority's service area, all travel-related expenses shall have been provided for as part of the contract or they shall be paid for by the Authority.
  - b) This section shall not prohibit employees from accepting items of nominal value which are generally available and are primarily intended for advertising. The Authority has determined nominal value to be \$25.00.
- 6) No employee or former employee having official responsibility for procurement transactions shall accept employment with any bidder, offeror or contractor with whom the employee or former employee dealt in an official capacity concerning procurement transactions for a period of one (1) year from the cessation of employment by the Authority unless the employee, or former employee, provides written notification to the Executive Director prior to commencement of employment by that bidder, offeror or contractor.
- 7) No employee may contract to provide goods or services to the Authority.
- 8) No employee shall have a financial interest in the purchase of Authority surplus material and equipment in excess of \$500 or purchase such surplus material unless allowed by law.

### **Gifts**

The following rules should guide employees' acceptance of gifts related to services provided in the course of their job.

- 1) Employees will not solicit, accept any personal gift, favor, service, money, business or professional opportunity, or anything of value which might reasonably be inferred as having the potential to influence the impartial discharge of duties, or as a reward for an official action.
- 2) Gifts should be discouraged. If the gifts cannot be declined gracefully and are of more than nominal value (see 5b above) the gifts shall be declared surplus property and addressed accordingly unless the gifts are consumables, e.g. cookies, in which they will be set out for all to consume. Employees should bear in mind that the donor of gifts, presents and favors may come to expect or seek preferential treatment. Therefore, the perception of an individual's action is as important as the monetary value of the gift.
- 3) Employees with procurement responsibilities will not accept gifts or money for services the Authority pays them to perform.
- 4) Favoritism, especially as a result of acceptance of a gift or favor, will not be tolerated. Employees will not give any special consideration, treatment or advantage to any vendor or citizen beyond that which is available to every other vendor or citizen.
- 5) Nothing contained herein prohibits employees from attending vendor-sponsored seminars or trade shows where they will benefit from receiving product information and learning of new techniques and product or service trends. Food, drinks and give-away items offered to all participants at such functions may be accepted by Authority employees attending.

## V. AUTHORIZED METHODS OF PROCUREMENT AND THRESHOLDS

### Authorized Purchase Methods

- 1) Field Purchase (See below)
- 2) Small Purchase (Section VII)
  - a) Goods and Services
  - b) Professional Services
- 3) Request for Proposals
  - a) Goods and Services (Section VIII)
  - b) Professional Services (Section IX & X)
- 4) Invitation for Bids (Competitive Sealed Bid) (Section XI)
- 5) Sole Source (Section XV)
- 6) Emergency (Section XVI)
- 7) Cooperative Procurements (Section XVII)
- 8) Public Auction (See below)
- 9) ~~Public-Private Partnership in Education and Infrastructure Act (PPEA) (See below)~~

Section XII. of this manual will explain the various methods and procedures for accepting procurements solicited from potential vendors.

### Thresholds – Small or Informal Purchases

- 1) **Under \$1,500 - Field Purchase, Small Purchases \$10,000 and below**

Small purchases under \$1,500 are considered field purchases for operational needs by Directors and Managers (or as delegated) for time and convenience purposes. Field purchases are to be held to a minimum and all are subject to review by the Purchasing Agent. Only in unusual circumstances may \$1,500.00 be exceeded.

Procedures for the purchase of goods and services from \$1,500 to \$10,000 will be prescribed by the Purchasing Agent or the Executive Director. The Purchasing Agent shall from time to time evaluate the use of field purchases and purchases \$10,000 and below to determine whether warehousing of spare parts or the like is advantageous. Single transactions \$10,000 and under do not require competition, though it's always advisable.
- 2) **All Purchases over \$10,000**

All purchases over \$10,000 must have a purchase order.
- 3) **Goods, Non-Professional Services and Construction: \$10,000.01 to \$50,000**

*Requires soliciting at least three (3) written or verbal quotes from valid sources.* Include businesses, if available, from the annual listing provided by the Authorities which includes businesses certified by the Virginia Department of Small Business and Supplier Diversity that sell the products and services most commonly purchased by the Authorities. A requisition is to be prepared and a tabulation of the quotes received should be forwarded to Purchasing where the documentation will be audited and, if approved, a purchase order will be prepared and emailed. Files are required for the annual audit. Requisitions without proper documentation

may be returned. It is strongly recommended that all quotes over \$10,000 be confirmed in writing.

- 4) **Goods ~~and~~, Non-Professional Services ~~and~~ Construction: \$50,000.01 to \$199,999.99**  
*Requires soliciting at least four (4) written quotes from valid sources.* No fewer than four (4) valid sources shall be solicited to submit written quotations for purchases between \$50,000 and \$199,999.99. Include businesses, if available, from the annual listing provided by the Authorities which includes businesses certified by the Virginia Department of Small Business and Supplier Diversity that sell the products and services most commonly purchased by the Authorities.

- 5) Construction services: \$50,000.01 to \$299,999.99  
*Requires soliciting at least four (4) written quotes from valid sources.* No fewer than four (4) valid sources shall be solicited to submit written quotations for purchases between \$50,000 and \$299,999.99. Include businesses, if available, from the annual listing provided by the Authorities which includes businesses certified by the Virginia Department of Small Business and Supplier Diversity that sell the products and services most commonly purchased by the Authorities.

- 5)6) Professional Services: >\$10,000 - \$80,000  
*Requires soliciting at least four (4) written quotes from valid sources.* Include businesses, if available, from the annual listing provided by the Authorities which includes businesses certified by the Virginia Department of Small Business and Supplier Diversity that sell the products and services most commonly purchased by the Authorities. Professional services are defined in the Glossary (Section XXVII). All other services are classified as non-professional. The VPPA provides the authority for local public bodies to develop procedures to solicit single or term contracts for professional services without requiring competitive negotiation, provided the aggregate or the sum of all phases is not expected to exceed \$80,000 (refer to Small Purchase procedures for professional services Page 12).

#### **Thresholds – Formal Procurement Procedures**

- 1) **Professional Services above \$80,000**  
Requires a formal Request for Proposal.
- 2) **Goods and Non-Professional Services: Over \$200,000 and above;**  
**Construction Service: Over \$300,000 and above**  
All purchases for goods and non-professional services over \$200,000 and construction related projects over \$300,000 must have a formal procurement process, either a competitive sealed bid or competitive negotiation, unless exceptions apply.

#### **Other Purchasing Methods**

- 1) **Public Auction**  
Upon a written determination made in advance that the purchase of goods, products or commodities from a public auction sale is in the best interests of the public, such items may be purchased at the auction, including online public auctions. The written determination, approved by the Purchasing Agent, is required stating the basis for the determination. All requests for using a public auction on procurements exceeding the formal competitive sealed



bidding process requirements must be reviewed and approved by the Executive Director or his designee. The written determination must be retained in the contract file.

**Public-Private Partnership in Education and Infrastructure Act (PPEA)**

- 2) ~~When authorized in advance by the Board of Directors, the Authority may solicit proposals for projects under the Virginia Public-Private Partnership in Education and Infrastructure Act as an alternative means of procurement to the options represented in this Manual. In soliciting proposals under the PPEA, the Authority shall follow the PPEA Guidelines (previously adopted by the Board of Directors of the RWSA only) and included as Appendix A to this Purchasing Manual as adopted by the Board of Directors of both the RWSA and the RSWA in 2013.~~

~~The Authority may also receive unsolicited proposals from potential contractors as prescribed in the Authority's PPEA Guidelines.~~

## **VI. EXEMPTIONS TO PROCUREMENT (QUOTES, BIDS, OR PROPOSALS)**

The Authority has determined that the following categories of purchases are often not susceptible to competitive purchasing and thus are either exempt from the relevant requirements in the purchasing procedure or are treated explicitly in sections of this Manual. However, one quote must be obtained and documented, and a purchase order must be issued for requirements over the delegated purchase limit.

Those categories are:

- 1) purchases less than or equal to the delegated purchase limit of \$10,000;
- 2) The following selected categories of goods and services up to and including the formal competitive process requirement:
  - a) legal services or expert witnesses or other services associated with litigation or regulatory proceedings;
  - b) books, pre-printed materials, reprints and subscriptions (e.g., print or electronic), pre-recorded audio and videocassettes, compact discs, slide presentations, etc., when only available from the publisher/producer;
  - c) academic/research consulting services;
  - d) honoraria, entertainment (speakers, lecturers, musicians, performing artists);
  - e) training that is specialized, proprietary, and not typically available to the general public for which competition is generally unavailable, off-site, and requires a registration fee. Contact the Procurement Division to ascertain if the training being requested is available through an existing contract or another source;
  - f) royalties and film rentals when only available from the producer or protected distributors;
  - g) professional organizational membership dues;
  - h) writers;
  - i) artists (does not include graphic artists); original works of art; and original, or authentic antique period art frames (does not include newly created replacement or reproduction frames);
  - j) photographers other than for graduations and yearbooks, e.g., for official photographs/portraits;
  - k) advertisements such as in newspapers, magazines, journals, radio, television, etc.;
  - l) utility charges, where competition is not practicably available;
  - m) accreditation fees and academic testing services; and
  - n) pumps and other equipment repair services when the initial anticipated cost is expected to be under the delegated purchase limit of \$10,000, but after equipment tear down it is realized additional repair work is needed and the ability to obtain competition is limited due to the circumstances. Documentation of a fair and reasonable price must be made prior to processing payment for any such purchase.

- 3) purchases of used equipment up to and including the formal competitive sealed bidding requirement. This also includes used equipment purchased at a public auction, if determined in writing that the purchase would be in the best interest of the Authority;
- 4) purchases from the federal government, other states and their agencies or institutions, and public bodies, if the terms and conditions of their contract permit such purchases and meet the requirement of the VPPA. Care must be exercised to be certain that the price is fair and reasonable. This exemption includes all purchased for good and/or services obtained within the Virginia Water and Wastewater Agency Response Network (VA WARN) emergency assistance program;
- 5) surplus property;
- 6) purchases for testing or evaluation services (limited to purchases of quantities considered necessary for complete and adequate testing) not to exceed the dollar threshold defined above for formal procurement of goods and non-professional services;
- 7) emergency purchases (competition obtained when practicable);
- 8) purchase or lease of real estate and easements;
- 9) travel services; and
- 10) purchase under a cooperative procurement contract through another state or local public agency as described in Section XVII of this Manual provided pricing under such contract was competitive.
- ~~10~~11) purchase of goods or services that are produced or performed by: a. Persons, or in schools or workshops, under the supervision of the Virginia Department for the Blind and Vision Impaired; or b. Employment services organizations that offer transitional or supported employment services serving individuals with disabilities<sup>[AA4]</sup> 2.2-4344.

## VII. SMALL OR INFORMAL PURCHASES

This section covers procedures for informal procurements of goods and non-professional services based on price, to include processes requiring both verbal and written quotes. For thresholds on informal purchases, to include thresholds that require written quotes, see Section V of this Manual. This Section does not include the procurement of non-professional services by competitive negotiations (see Section VIII for competitive procurement procedures).

Your total requirements should be considered in determining the value of the purchase. You cannot use an informal, small purchase to drive a large sole source award later.

### Obtaining Quotes

When you get a verbal or written quote, make sure you get complete information. Oral or written quote records must show:

- 1) name and address of vendor;
- 2) complete item description or service offered;
- 3) price quoted;
- 4) delivery/performance date(s);
- 5) payment terms;
- 6) FOB point (see definition in Glossary); and
- 7) name of person quoting prices, and date received, if not confirmed in writing.

When complete send a requisition with all documentation to Purchasing to have a purchase order issued.

FOB Destination Prepaid and Allowed is preferred and should be requested. You can also request this by asking for “a delivered price”. This is important because title and risk of loss are borne by the vendor until the Authority actually receives the goods. In a written quote “FOB Destination Prepaid and Allowed” should be specified.

### Evaluation

There are three determining factors when evaluating quotes:

- 1) **Responsive:** Did the vendor meet all minimum requirements requested, including specifications payment terms, and delivery time?
- 2) **Responsible:** Is the vendor deemed capable of doing the job, based on references or knowledge of prior jobs? *Since you are selecting the vendors to contact, a majority of the time you should know this before you contact them for a price.*
- 3) **Price:** Is the price reasonable and within budget?

When evaluating price, make sure you have “apples and apples”. Specifically, ensure that the items are equal or meet your minimum requirements, shipping is included in all quotes, and consider reasonable prompt payment discounts.

If the price is not reasonable, or affordable, you can try to get a lower price. You can:

- 1) revise your specifications or delivery schedule and ask everyone to re-quote; or
- 2) cancel the procurement.

You **CANNOT**:

- 1) "Auction"; or
- 2) let vendors know what other quotes are until ***after*** award.

**SOLICIT QUOTES FROM VENDORS YOU BELIEVE ARE QUALIFIED TO DO THE WORK REQUESTED. DO NOT SOLICIT FROM UNQUALIFIED VENDORS.**

## VIII. REQUEST FOR PROPOSAL - OTHER THAN PROFESSIONAL SERVICES

Competitive negotiation is a method for purchasing non-professional services, and goods as well as construction in limited circumstances. The “professional services” definition is included in the Glossary to this Manual (Section XXVII). All other services are categorized as non-professional.

Unlike the use of the RFP process for professional services, which prohibits the consideration of cost in the initial evaluation process, cost can be a consideration when using competitive negotiation for other than professional services and should always be included within Evaluation Criteria, though it need not be the sole determining factor.

### Procedure:

#### 1) The RFP is prepared and stating in general terms:

- a) the services sought as well as related contingent services that may be needed;
- b) the time and place for receipt of proposals;
- c) the factors to be used in evaluating proposals, including whether a numerical scoring system will be used in evaluation of the proposal and cost;
- d) the contractual terms and conditions; to include whether services are specific to a single project for the duration of that project, or multiple project for a specific term; and
- e) any unique capabilities or qualifications required of the proposers.

#### ~~1)2)~~ A Public Notice of RFP’s exceeding \$200,000 for goods and non-professional services; exceeding \$300,000 for construction projects shall be:

- a) Posted on the eVA website and/or advertised in The Daily Progress and/or Cville Weekly at least ten (10) business days prior to receipt of proposals; and
- b) posted on the Authority’s Procurement website at least ten (10) business days prior to the date set for receipt of proposals.
- c) may be sent directly to firms that have requested to be notified of work;
- d) may be sent to those firms believed to be qualified to perform the work; and
- e) if potential offerors are solicited directly, the Authority must include businesses certified by the Virginia Department of Small Business and Supplier Diversity as a small business, a women-owned business, a minority-owned business, a service disabled veteran-owned business and/or a micro business. Public posting on the eVA website meets this requirement.

#### ~~2)3)~~ Proposals are:

- a) Received in the manner stated in the RFP, and receipt is documented.
- b) Proposals not received by the due date and time specified in the RFP shall not be opened and should be returned unopened.
- c) All RFP responses are to be evaluated:
  - a) Proposals not meeting requirements should be evaluated lower but only bids in response to an IFB may be determined to be nonresponsive.
  - d) Proposals are evaluated solely on the basis of the criteria set forth in the RFP, using the scoring criteria (qualitative and/or quantitative) previously determined, including

cost[AA5]. The offeror shall state any exception to any contractual terms or conditions, including any liability provisions contained in the Request for Proposal in writing at the time of responding to such Request for Proposal if so requested by the Authority. Such exceptions shall be considered during negotiation but shall not be used as a basis for scoring or evaluating which offerors are selected for negotiations. Prior to scoring, if a proposal is missing any needed information in order to evaluate or the committee has any specific questions regarding information in the proposal, a short period of time may be provided to the offeror to answer questions and provide missing information. A deadline should be set for receipt of the information, and if the offeror does not meet the deadline, it may be necessary to score the proposal lower in the areas affected by the lack of information/questions;

- e) A short list of firms is developed and the Authority shall engage in individual discussions with two or more offerors deemed fully qualified. Repetitive informal interviews are permissible.
- f) At the discussion stage, the Authority may discuss nonbinding estimates of total project costs, including, but not limited to, life-cycle costing, and where appropriate, nonbinding estimates of price for services.
- g) At the conclusion of discussions, a final ranking is done on the basis of evaluation factors published in the RFP and all information developed in the selection process to this point.
- h) The Authority shall select, in the order of preference, two or more offerors whose professional qualifications and proposed services are deemed most meritorious.
- i) Negotiations shall then be conducted, beginning with the offeror ranked first.
  - i. If a contract satisfactory and advantageous to the public body can be negotiated at a price considered fair and reasonable, the award shall be made to that offeror.
  - ii. Otherwise, negotiations with that offeror are formally *terminated* and the Authority cannot re-engage that offeror in further negotiations. Then negotiations shall be conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price.
- j) When multiple awards have been approved in advance of the RFP by the Executive Director or Purchasing Agent and the terms and conditions of multiple awards have been included in the RFP, awards may be made to more than one offeror.
- ~~e) A short list of firms is developed and presentations or discussions with offerors may be scheduled, as necessary, to clarify material in the proposal, to help determine those fully qualified and best suited.~~
- ~~f) A final ranking is done at the completion of the interview process if interviews are conducted, or after receipt of answer to questions, if asked, are received. Negotiations are then conducted with each of the two or more offerors selected (at least the top two) as being fully qualified and best suited among those submitting proposals.~~
- ~~g) After negotiations have been conducted with each offeror selected, the Authority shall select the one (or more than one when allowed by the RFP) which, in its opinion, has made the best proposal and provides the best value, and award the contract to that offeror.~~
- ~~h) If the Authority determines, in writing and in its sole discretion, that only one offeror is fully qualified, or that one offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that offeror.~~

~~i) When multiple awards have been approved by the Executive Director or Purchasing Agent in advance of the RFP and the terms and conditions of multiple awards have been included in the RFP, awards may be made to more than one offeror.~~

Any agreement reached as a result of negotiation must incorporate all agreements from negotiations into the written contract.

Any offeror may inspect proposal records after the evaluation and negotiation are completed but prior to award of the contract, except in cases where the Purchasing Agent or Executive Director have decided not to accept any of the proposals and to reopen the procurement. All records subject to public disclosure under the Virginia [Freedom of Information Act](#) shall be open to public inspection only after award of the contract.

When the terms and conditions of multiple awards have been included in the RFP in advance, awards may be made to more than one offeror.

#### VPPA

##### § 2.2-4302.2. Process for competitive negotiation.

A (3) For goods, nonprofessional services, and insurance, selection shall be made of two or more offerors deemed to be fully qualified and best suited among those submitting proposals, on the basis of the factors involved in the Request for Proposal, including price if so stated in the Request for Proposal. In the case of a proposal for information technology, as defined in § [2.2-2006](#), a public body shall not require an offeror to state in a proposal any exception to any liability provisions contained in the Request for Proposal. Negotiations shall then be conducted with each of the offerors so selected. The offeror shall state any exception to any liability provisions contained in the Request for Proposal in writing at the beginning of negotiations, and such exceptions shall be considered during negotiation. Price shall be considered, but need not be the sole or primary determining factor. After negotiations have been conducted with each offeror so selected, the public body shall select the offeror which, in its opinion, has made the best proposal and provides the best value, and shall award the contract to that offeror. When the terms and conditions of multiple awards are so provided in the Request for Proposal, awards may be made to more than one offeror. Should the public body determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that offeror

For a detailed sample format for a Request for Proposal refer to the Commonwealth of Virginia Department of General Services, Division of Purchases and Supply, Agency Procurement and Surplus Property Manual (APSPM), Chapter 7, Annex A

Contract awards from all formal Requests for Proposals with competitive negotiation for which fees may exceed ~~\$3200,000~~ shall be made by affirmative action of the Authority's Board of Directors upon recommendation of the Executive Director, except that with respect to awards of contracts for health insurance and related employee benefits contracts affecting open enrollment, and awards of contracts for purchase of chemicals (including GAC materials) used at various plants in the normal course of operations, which the Board's approved yearly operation budget contemplates as an operating expense, no additional affirmative action by the Board shall be required to proceed with the purchase. Affirmative action of the Board may be in the form of an approved annual budget and/or capital budget, and approval of Capital Improvement Program. The Executive Director may appoint a Selection Committee to review proposals, conduct competitive negotiations, and rank proposals.

The Executive Director is authorized to award contracts from Request for Proposals whenever fees are ~~\$3200,000~~ or less.



## IX. REQUEST FOR PROPOSAL - PROFESSIONAL SERVICES

Except as otherwise allowed by the Authority's small purchase procedures, competitive negotiation must, by law, be used for purchasing professional services if the estimated cost for such services is expected to be \$80,000 or more. Professional Services are defined in the VPPA as "work performed by an independent contractor within the scope of the practice of accounting, actuarial services, architecture, land surveying, landscape architecture, law, dentistry, medicine, optometry, pharmacy or professional engineering." All other services are categorized as non-professional.

A difference between the RFP process for professional services is that, for professional services, the law prohibits the consideration of cost in the initial evaluation process though it can be considered with the introduction of "non-binding cost estimates" after the responses have been evaluated and a short list developed for interviews.

### Procedure:

#### 1) The RFP is prepared and stating in general terms:

- a) the services sought;
- b) the time and place for receipt of proposals;
- c) the factors to be used in evaluating proposals;
  - i. *The RFP must not request estimates of labor hours or cost for services.*
- d) the contractual terms and conditions; and
- e) any unique capabilities or qualifications required of the proposers.

#### 2) A Public Notice of the RFP shall be:

- a) Posted on the eVA website and/or advertised in The Daily Progress or Cville Weekly at least ten (10) business days prior to receipt of proposals;
- b) posted on the Authority Procurement website at least ten (10) business days prior to receipt of proposals.
- c) may be sent directly to firms that have requested to be notified of work;
- d) may be sent to those firms believed to be qualified to perform the work; and
- e) if potential offerors are solicited directly, the Authority must include businesses certified by the Virginia Department of Small Business and Supplier Diversity as a small business, a women-owned business, a minority-owned business, a service-disabled veteran-owned business and/or a micro business. Public posting on the eVA website meets this requirement.

#### 3) Proposals are:

- a) Received in the manner stated in the RFP, and receipt is documented.
- b) Proposals not received by the due date and time specified in the RFP shall not be opened and should be returned unopened.
- c) All RFP responses are to be evaluated:
  - b) Proposals not meeting requirements should be evaluated lower but only bids in response to an IFB may be determined to be nonresponsive.
  - d) Proposals are evaluated solely on the basis of the criteria set forth in the RFP, using the scoring criteria (qualitative and/or quantitative) previously determined, including cost<sup>AA6</sup>. The offeror shall state any exception to any contractual terms or conditions, including any liability provisions contained in the Request for Proposal in writing at

the time of responding to such Request for Proposal if so requested by the Authority. Such exceptions shall be considered during negotiation but shall not be used as a basis for scoring or evaluating which offerors are selected for negotiations. Prior to scoring, if a proposal is missing any needed information in order to evaluate or the committee has any specific questions regarding information in the proposal, a short period of time may be provided to the offeror to answer questions and provide missing information. A deadline should be set for receipt of the information, and if the offeror does not meet the deadline, it may be necessary to score the proposal lower in the areas affected by the lack of information/questions;

- e) A short list of firms is developed and the Authority shall engage in individual discussions with two or more offerors deemed fully qualified. Repetitive informal interviews are permissible.
  - f) At the discussion stage, the Authority may discuss nonbinding estimates of total project costs, including, but not limited to, life-cycle costing, and where appropriate, nonbinding estimates of price for services.
  - g) At the conclusion of discussions, a final ranking is done on the basis of evaluation factors published in the RFP and all information developed in the selection process to this point.
  - h) The Authority shall select, in the order of preference, two or more offerors whose professional qualifications and proposed services are deemed most meritorious.
  - i) Negotiations shall then be conducted, beginning with the offeror ranked first.
    - iii. If a contract satisfactory and advantageous to the public body can be negotiated at a price considered fair and reasonable, the award shall be made to that offeror.
    - iv. Otherwise, negotiations with that offeror are formally *terminated* and the Authority cannot re-engage that offeror in further negotiations. Then negotiations shall be conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price.
- ~~a) When multiple awards have been approved in advance of the RFP by the Executive Director or Purchasing Agent and the terms and conditions of multiple awards have been included in the RFP, awards may be made to more than one offeror.~~
- ~~b) Received as specified in the RFP and receipt is documented.~~
- ~~c) Proposals not received by the due date and time specified in the RFP shall not be opened and should be returned unopened.~~
- ~~d) None of the information in the proposal is disclosed.~~
- ~~e) All RFP responses are to be evaluated~~
- ~~f) Proposals not meeting requirements should be ranked lower but only bids in response to an invitation for bid may be determined to be nonresponsive.  
Proposals are evaluated solely on the basis of the criteria set forth in the RFP, ranking offerors using previously determined qualitative or quantitative means.~~
- ~~g) A short list of firms is developed and the Authority shall engage in individual discussions with two or more offerors deemed fully qualified. Repetitive informal interviews are permissible.~~
- ~~h) At the discussion stage, the Authority may discuss nonbinding estimates of total project costs, including, but not limited to, life cycle costing, and where appropriate, nonbinding estimates of price for services.~~

- ~~i)a) At the conclusion of discussions, a final ranking is done on the basis of evaluation factors published in the RFP and all information developed in the selection process to this point.~~
- ~~j)a) The Authority shall select, in the order of preference, two or more offerors whose professional qualifications and proposed services are deemed most meritorious.~~
- ~~k)a)        Negotiations shall then be conducted, beginning with the offeror ranked first.~~
- ~~i.        If a contract satisfactory and advantageous to the public body can be negotiated at a price considered fair and reasonable, the award shall be made to that offeror.~~
- ~~ii.i.        Otherwise, negotiations with that offeror are formally *terminated* and the Authority cannot re-engage that offeror in further negotiations. Then negotiations shall be conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price.~~
- ~~l)a) When multiple awards have been approved in advance of the RFP by the Executive Director or Purchasing Agent and the terms and conditions of multiple awards have been included in the RFP, awards may be made to more than one offeror.~~

Should the Authority determine in writing and in its sole discretion that only one offeror is fully qualified, or that one offeror is clearly more highly qualified than the others under consideration, a contract may be negotiated and awarded to that offeror.

Any agreement reached as a result of negotiation must incorporate all agreements from negotiations into the written contract.

Any offeror may inspect proposal records after the evaluation and negotiation are completed but prior to award of the contract, except in cases where the Purchasing Agent or Executive Director have decided not to accept any of the proposals and to reopen the procurement. All records subject to public disclosure under the Virginia Freedom of Information Act shall be open to public inspection only after award of the contract.

#### VPPA

##### § 2.2-4302.2 Process for competitive negotiation.

A (4). For professional services, the public body shall engage in individual discussions with two or more offerors deemed fully qualified, responsible and suitable on the basis of initial responses and with emphasis on professional competence, to provide the required services. Repetitive informal interviews shall be permissible. The offerors shall be encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project, as well as alternative concepts. In addition, offerors shall be informed of any ranking criteria that will be used by the public body in addition to the review of the professional competence of the offeror. The Request for Proposal shall not, however, request that offerors furnish estimates of man-hours or cost for services. At the discussion stage, the public body may discuss nonbinding estimates of total project costs, including, but not limited to, life-cycle costing, and where appropriate, nonbinding estimates of price for services. In accordance with § 2.2-4342, proprietary information from competing offerors shall not be disclosed to the public or to competitors. For architectural or engineering services, the public body shall not request or require offerors to list any exceptions to proposed contractual terms and conditions, unless such terms and conditions are required by statute, regulation, ordinance, or standards developed pursuant to § 2.2-1132, until after the qualified offerors are ranked for negotiations. At the conclusion of discussion, outlined in this subdivision, on the basis of evaluation factors published in the Request for Proposal and all information developed in the selection process to this point, the public body shall select in the order of preference two or more offerors whose professional qualifications and proposed services are deemed most meritorious.

Negotiations shall then be conducted, beginning with the offeror ranked first. If a contract satisfactory and advantageous to the public body can be negotiated at a price considered fair and reasonable and pursuant to contractual terms and conditions acceptable to the public body, the award shall be made to that offeror. Otherwise, negotiations with the offeror ranked first shall be formally terminated and negotiations conducted with the offeror ranked second, and so on until such a contract can be negotiated at a fair and reasonable price.

Notwithstanding the foregoing, if the terms and conditions for multiple awards are included in the Request for Proposal, a public body may award contracts to more than one offeror.

Should the public body determine in writing and in its sole discretion that only one offeror is fully qualified or that one offeror is clearly more highly qualified and suitable than the others under consideration, a contract may be negotiated and awarded to that offeror.

Contract awards from all formal Requests for Proposals with competitive negotiation which fees may exceed \$~~3~~200,000 shall be made by affirmative action of the Authority's Board of Directors upon recommendation of the Executive Director. The Executive Director may appoint a Selection Committee to review proposals, conduct competitive negotiations and rank proposals.

The Executive Director is authorized to award contracts from Request for Proposals whenever fees are \$~~3~~200,000 or less.

## X. REQUEST FOR PROPOSAL - PROFESSIONAL SERVICES CONTRACTS FOR MULTIPLE PROJECTS AND MULTIPLE YEARS

A contract for architectural or professional engineering services relating to ~~construction~~ projects<sup>[AA7]</sup> may be negotiated by a public body, for multiple projects within limits outlined in the VPPA. The procurement process is the same as that used for professional services.

The VPPA allows such contracts providing:

- 1) the projects require similar experience and expertise;
- 2) the nature of the projects is clearly identified in the Request for Proposal; and
- 3) the contract term is limited to one year or when the cumulative total project fees reach the maximum cost authorized in the VPPA, whichever occurs first.

~~For professional engineering and architectural services, t~~The Authority may award contracts renewable ~~for three additional terms~~~~one-year terms~~, with the written approval of the Executive Director.~~;~~ ~~For all other professional service contracts, contract can be renewed~~ for four additional one-year terms at the option of Authority.

The law requires that in such contracts:

- 1) the fair and reasonable prices, as negotiated, shall be used in determining the cost of each project performed;
- 2) the sum of all such projects ~~performed within a single one-year term~~ shall not exceed \$610 million; and
- 3) the ~~fee sum~~ for any single project ~~within a single one-year term~~ shall not exceed \$2.5 million as specified in § ~~2.2-4303.1~~<sup>[AA8]</sup>.

Any unused amounts from the first contract term shall *not* be carried forward to ~~any the~~ additional term in determining the sum of all projects within a term. However, costs against the allowed limit for a single project shall be cumulative from the initial one-year term and subsequent additional terms.

Competitive negotiations for such contracts may result in awards to more than one offeror provided:

- 1) the RFP so states; and
- 2) the Authority has established procedures for distributing multiple projects among the selected contractors during the contract term. Such procedures shall prohibit requiring the selected contractors to compete for individual projects based on price.

### **VPPA**

#### **§ 2.2-4303.1 Architectural and professional engineering term contracting; limitations.**

A. A contract for architectural or professional engineering services relating to multiple construction projects may be awarded by a public body, provided (i) the projects require similar experience and expertise, (ii) the nature of the projects is clearly identified in the Request for Proposal, and (iii) the contract is limited to a term of one year or when the cumulative total project fees reach the maximum authorized in this section, whichever occurs first.

Such contracts may be renewable for three additional one-year terms at the option of the public body. Any unused amounts from one contract term shall not be carried forward to any additional term, except as otherwise provided by the Restructured Higher Education Financial and Administrative Operations Act (§ 23.1-1000 et seq.). The fair and reasonable prices as negotiated shall be used in determining the cost of each project performed.

The sum of all projects performed in a contract term shall not exceed \$10 million, and the fee for any single project shall not exceed \$2.5 million.

B. Competitive negotiations for such architectural or professional engineering services contracts may result in awards to more than one offeror, provided (i) the Request for Proposal so states and (ii) the public body has established procedures for distributing multiple projects among the selected contractors during the contract term. Such procedures shall prohibit requiring the selected contractors to compete for individual projects based on price.

## XI. Competitive Sealed Bid

Competitive sealed bidding is required for procurements over \$200,000 (over \$300,000 for construction related ~~where~~ procurements) where performance specifications can be written in specific detail and price is the basis of award. In competitive sealed bidding the Invitation for Bid (IFB) is the tool used to list the purchase specifications or scope of work and all contractual terms and conditions, including a statement of any requisite qualifications of potential ~~contractors~~ [AA9]. At least ten (10) days prior to date set for receipt of bids, IFBs are to be posted on the Authority's Public Announcement Board and the "Proposals & Procurement" section of its website. IFBs may also be posted on other websites such as the state's Virginia Business Opportunities site. IFBs are not required by law to be advertised in newspapers. In addition to the public notice, bids must be solicited directly from potential qualified bidders. At a minimum, any such direct solicitations shall include businesses selected from an electronic list made available by the Virginia Department of Small Business and Supplier Diversity (SBSD). Public posting on the eVA website fulfills the requirement to directly solicit potential qualified bidders and to include businesses certified by SBSB.

Bids shall be received at the specified location and remain unopened in a secure area until the date and time established for opening. When bids are received they should be date and time stamped on the envelope showing the date and time of receipt. The Purchasing Agent shall be responsible for deciding when the receipt deadline has arrived and no bids shall be accepted after that time. Late bids cannot be opened or considered.

Unlike RFP processing, competitive sealed bids are publicly opened and the following information read aloud:

- 1) bidders' names;
- 2) significant unit prices or lot prices as may be deemed appropriate by the Authority;
- 3) discount terms offered, if discount terms are to be considered in making the award,
  - a) if the Authority is certain that it can regularly process payments within a prescribed time frame and wants to consider cash discounts in its evaluation, then it may do so by including a statement in the bid document such as "discounts for prompt payment within # (state number of days, e.g., 10, 20, etc.) days will be considered in determining net low bid"; and
- 4) brand names and model numbers only if requested by the attendees otherwise can be provided on bid tabulation provided later.

Any competitive sealed bidding bidder, upon request, shall be afforded the opportunity to inspect bid records within a reasonable time after opening of all bids but prior to award, except in the event the agency decides not to accept any of the bids and to reopen the procurement contract. Otherwise, bid records shall be open to public inspection only after award of the contract. (VPPA, § 2.2-4342C).

Awards are, by law, based on a determination of the lowest responsive and responsible bidder. Responsible and responsive bidder/offeror are defined in Section XXVII of this Manual. When the terms and conditions of multiple awards are so provided in the IFBs, awards may be made to more than one bidder.

A responsive bid must comply in all material aspects with the terms and conditions and specifications in the IFB. Bids shall be evaluated based upon the requirements set forth in the invitation, which may include special qualifications of potential contractors, life-cycle costing, value analysis, and any other criteria such as inspection, testing, quality, workmanship, delivery, and suitability for a particular purpose, which are helpful in determining acceptability. Failure to comply with the requirements set forth in the IFB may result in a bid being declared non-responsive. For example, and not by way of limitation: failure to sign the bid; return required bid documents; substitution of a vendor's terms for the Authority's; deletion of terms and conditions stated in the IFB; or failure to offer a product or service that meets the specifications may be grounds for this finding. A non-responsive bid is removed from consideration for award. The Authority has the right to waive informalities.

Caution must be exercised in words used in all aspects of the IFB from specifications to terms and conditions for words such as "may", "should", "could", "will" and "must". If you say a specific action "may cause rejection of the bid" you have leeway to exercise your discretion. However, if you say a specific action "shall cause rejection of the bid" you have no discretion as "shall" is an imperative.

No contract may be awarded to a bidder who is determined by the Purchasing Agent to be non-responsible. The Purchasing Agent must follow the procedure per the [VPPA 2.2-4359](#) for declaration of non-responsibility of a bidder. Responsible bidder/offeror and responsive bidder are defined in Section XXVII of this Manual. In determining the responsibility of a bidder, the following criteria will be considered:

- 1) the ability, capacity or skill of the bidder to perform the contract or provide the services required;
- 2) whether the bidder can perform the contract or provide the service promptly, or within the time specified, without delay or interference;
- 3) the character, integrity, reliability, reputation, judgment, experience and efficiency of the bidder;
- 4) the quality of performance on previous contracts or services, for the Authority or others;
- 5) the previous and existing compliance by a bidder with laws and ordinances relating to the contract or service;
- 6) the sufficiency of the financial resources and ability of the bidder to perform the contract or provide the service;
- 7) the quality, availability, and adaptability of the goods or services to the particular use required;
- 8) the number and scope of any conditions attached to the bid;
- 9) whether the bidder is in arrears to the Authority on a debt or contract or is in default on a surety to the Authority; and
- 10) such other information as may be secured by the Purchasing Agent, having a bearing on the decision to award the contract.

Contract awards from competitively sealed bids exceeding \$~~3200,000~~ shall be made by affirmative action of the Authority's Board of Directors upon recommendation of the Executive Director, except that with respect to awards of contracts for health insurance and related employee benefits contracts affecting open enrollment, and awards of contracts for purchase of chemicals (including GAC materials) used at various plants in the normal course of operations, which the Board's approved yearly



operation budget contemplates as an operating expense, no additional affirmative action by the Board shall be required to proceed with the purchase.

Negotiation with the Lowest Responsible Bidder: If the bid from the lowest responsible bidder exceeds available funds, the Authority may negotiate with the apparent low bidder to obtain a contract price within available funds if the solicitation contains the appropriate clause to do so within the IFB, Virginia Code § [2.2-4318](#).

The Authority's process for negotiations includes:

- 1) The requesting department shall provide the Executive Director with a written determination that the apparent low bid exceeds available funds. Such determination shall be confirmed in writing by the Executive Director or his designee. The requesting department shall also provide the Executive Director with a suggested reduction in scope or other suggested bid modification(s) to obtain a contract price within available funds.
- 2) The Executive Director or designee shall advise the lowest responsible bidder in writing that the proposed purchase exceeds available funds. He shall further suggest a reduction in scope or other bid modification(s) for the proposed purchase and invite the lowest responsible bidder to amend its bid based upon the proposed reduction in scope or other bid modification(s).
- 3) Informal discussions shall be commenced with the low bidder, and repetitive informal discussions for the purposes of obtaining a contract within available funds shall be permissible.
- 4) The low bidder shall submit an addendum to its bid, which addendum shall include the change in scope for the proposed purchase, the reduction in price and the new contract value. If the addendum is acceptable to the Authority, the Authority may award a contract within funds available to the lowest responsible bidder based upon the amended bid proposal.
- 5) The Authority reserves the right to infuse additional funds during, or subsequent to negotiations to meet a negotiated price.
- 6) If the Authority and the lowest responsible bidder cannot negotiate a contract within available funds, all bids shall be rejected.

Determinations of responsiveness and responsibility shall be made by the Purchasing Agent in consultation, if necessary, with the Authority's Attorney.

For a detailed sample format for an Invitation for Bid refer to the Commonwealth of Virginia Department of General Services, Division of Purchases and Supply, Agency Procurement and Surplus Property Manual (APSPM), Chapter 6, Annex B.

## **XII. RECEIVING SOLICITATIONS – METHODS AND PROCEDURES**

This section will explain the Authority’s procedures for receiving responses to solicitations. Changes to the VPPA now require bids to be received electronically and in-person concurrently.

In addition to mail and hand delivery, per § 2.2-4303 of the VPPA, all local public bodies must provide an option for vendors to submit responses via the Commonwealth’s statewide electronic procurement system, known as eVA, or other electronic means.

The following are guidelines for receiving responses to each type of solicitation.

### **Definitions:**

Authorized Methods and Thresholds of procurement are determined in Section V.

Quotes Informal - can be verbal or written and are usually obtained by managers or other staff for small – informal threshold purchases for goods and services.

Quotes Formal – requests for formal quotes are written RFQs for the solicitation from vendors for goods or services.

IFB – formal written Invitation for Bid (a.k.a. Request for Bids) seeking solicitations for goods and services.

RFP – formal written Proposals seeking solicitation for goods, non-professional services, and professional services.

Verbal – communications between Rivanna staff and current or potential vendors via phone, face-to-face, DM texts.

Mail/Hand Delivery – USPS mail received at Main Administrative Office, delivery from UPS, FedEx or equivalent parcel delivery 3<sup>rd</sup> party to Main Administrative Office.

Email - email sent to the designated address as specified in each procurement document.

Electronic –eVA ~~is~~—the Commonwealth of Virginia’s statewide electronic procurement system. This system will show all applicable posted procurements from the Authority. The system will hold all vendor responses to procurements “as sealed” until the proper due date and time.

(Note – vendors must be registered by the eVA system to participate in the eVA process. This is a separate process that is not controlled or operated by the Authorities.)

Main Administrative Office – 695 Moores Creek Lane, Charlottesville, VA 22902. For deliveries – 2<sup>nd</sup> floor of main administrative office.

### **Responses to RFQs – (Quotes):**

Quotes can be received verbally and via mail, hand delivery or electronically. See Authorized Methods of Procurement and Thresholds (Section V) of this manual and Small or Informal Purchases (Section VII) for more information on Request for Quotes.

- 1) **Verbal:** Informal only - when verbal quotes are received, the requester will send necessary information to the purchasing staff to complete the purchase. No Request for Quotes is drafted and sent out.
- 2) **Mail/Hand Delivery:** Informal and Formal - quotes are received via mail or hand delivery in response to the Authority's solicitation, then given to the appropriate purchasing staff to complete the purchase as needed.
- 3) **Email:** Informal and Formal - quotes are received via email to the Authority's solicitation, then given to the appropriate purchasing staff to complete the purchase as needed.
- 4) **Electronic:** Formal quotes only – occasionally, RFQ will be posted to the eVA where potential vendors may submit electronically their response to the Authority's Request for Quotes.

After quotes are received via one of the methods listed above, purchasing staff should then receive a requisition or instructions for award from the requesting staff. The selected quote and any other documentation regarding the solicitation should be attached to the request.

### **Responses to IFBs – (Bids):**

Bids must stay sealed until the bid opening date and time, which must be done publicly. Bids CANNOT be received via email as that wouldn't satisfy the requirement for bids to stay sealed until the bid opening due date and time. See Authorized Methods of Procurement and Thresholds (Section V) of this manual and Competitive Sealed Bid (Section IX) for more information on Request for Bids.

- 1) **Verbal:** Not allowed for IFB
- 2) **Mail/Hand Delivery:** IFB - bids are received via mail or hand delivery in response to the Authority's solicitation. Bids are logged by the Administrative Asst. then given to the appropriate purchasing staff to complete the procurement process as needed.
- 3) **Email:** Not allowed for IFB
- 5) **Electronic:** IFB will be posted to the eVA site where potential vendors may submit electronically their response to the Authority's Request for Bid through the eVA site.

After the public opening, a preliminary bid tabulation will be completed and posted to the eVA site. This tabulation is also available to any bidder that did not submit via eVA at request. Once all bid information is received and opened, the requesting staff should review and follow procedures for awarding the winning vendor.

### **Responses to RFPs – (Proposals):**

Proposals can be received via mail, hand delivery or eVA. Proposals stay sealed until the opening date and time. See Authorized Methods of Procurement and Thresholds (Section V) of this manual and Request for Proposal (Sections VIII, IX and X) for more information on Request for Proposals.

- 1) **Verbal:** Not allowed for RFP
- 2) **Mail/Hand Delivery:** RFP - are received via mail or hand delivery in response to the Authority's solicitation. RFPs are logged by the Administrative Asst. then given to the appropriate purchasing staff to complete the procurement process as needed.
- 3) **Email:** Not allowed for RFP

**6) Electronic:** RFP will be posted to the eVA where potential vendors may submit electronically their response to the Authority's Request for Proposals through the eVA site.

Proposals do not have to be opened publicly. A preliminary bid tabulation is completed and will be posted to the eVA site.

Once all proposal information is available for viewing, the requesting staff will review and follow procedures for awarding the winning vendor.

## **XII. PREQUALIFICATION PROCESS FOR CONSTRUCTION CONTRACTS**

- 1) The Executive Director or his designee may, in his discretion and when he believes it to be in the best interests of the Authority, require prequalification of prospective contractors to bid on a specific construction project and/or future projects for the Authority defined by category, e.g. mechanical projects for the Authority. The purpose of such prequalification shall be to limit prospective bidders for such construction project to contractors who show themselves to be qualified to construct the project. In addition, the IFB may waive the requirement for certain bonds when the pre-qualification process is used. When the prequalification process is used for a project, only contractors who have complied with the prequalification process and have been determined qualified will be eligible to submit bids for the project.
- 2) The Executive Director or his designee shall develop the appropriate documentation for potential contractors to apply for pre-qualification. The Executive Director or his designee may prescribe in such documentation specific mandatory requirements contractors must meet to prequalify for specific projects.
- 3) In conducting prequalification of potential contractors, the Executive Director or his designee shall follow this prequalification process and the requirements of Virginia Code § [2.2-4317](#).
- 4) The documentation used in the Authority's prequalification process shall set forth the criteria upon which the qualifications of such contractors will be evaluated. The documentation shall request of prospective contractors only such information as is appropriate for an objective evaluation of all prospective contractors pursuant to such criteria. The documentation shall allow the prospective contractor seeking prequalification to request, by checking the appropriate box, that all information voluntarily submitted by the contractor pursuant to this subsection shall be considered a trade secret or proprietary information subject to the provisions of subsection F of § [2.2-4342](#).
- 5) In all instances in which the Authority requires prequalification of potential contractors for construction projects, advance notice shall be given of the deadline for the submission of prequalification applications. The deadline for submission shall be sufficiently in advance of the date set for the submission of bids for such construction so as to allow the procedures set forth in this subsection to be accomplished.
- 6) At least 30 days prior to the date established for submission of bids or proposals under the procurement of the contract for which the prequalification applies, the Authority shall advise in writing each contractor who submitted an application whether that contractor has been prequalified. In the event that a contractor is denied prequalification, the written notification to the contractor shall state the reasons for the denial of prequalification and the factual basis of such reasons.
- 7) A decision by the Executive Director or his designee denying prequalification under the provisions of this subsection shall be final and conclusive unless the contractor appeals the decision as provided in § [2.2-4357](#).
- 8) The Authority may deny prequalification to any contractor only if the public body finds one of the following:
  - a) the contractor does not have sufficient financial ability to perform the contract that would result from such procurement. If a bond is required to ensure performance of a contract, evidence that the contractor can acquire a surety bond from a corporation included on the United States Treasury list of acceptable surety corporations in the

amount and type required by the Authority shall be sufficient to establish the financial ability of the contractor to perform the contract resulting from such procurement;

- b) the contractor does not have appropriate experience to perform the construction project in question;
  - c) the contractor or any officer, director or owner thereof has had judgments entered against him within the past ten years for the breach of contracts for governmental or nongovernmental construction, including, but not limited to, design-build or construction management;
  - d) the contractor has been in substantial noncompliance with the terms and conditions of prior construction contracts with the Authority without good cause. If the Authority has not contracted with a contractor in any prior construction contracts, the public body may deny prequalification if the contractor has been in substantial noncompliance with the terms and conditions of comparable construction contracts with another public body without good cause. The Authority may not utilize this provision to deny prequalification unless the facts underlying such substantial noncompliance were documented in writing in the prior construction project file and such information relating thereto given to the contractor at that time, with the opportunity to respond;
  - e) the contractor or any officer, director, owner, project manager, procurement manager or chief financial official thereof has been convicted within the past ten years of a crime related to governmental or nongovernmental construction or contracting, including, but not limited to, a violation of (i) Article 6 (§ [2.2-4367](#) et seq.) of the Virginia Public Procurement Act, (ii) the *Virginia Governmental Frauds Act* (§ [18.2-498.1](#) et seq.), (iii) Chapter 4.2 (§ [59.1-68.6](#) et seq.) of Title 59.1, or (iv) any substantially similar law of the United States or another state;
  - f) the contractor or any officer, director or owner thereof is currently debarred pursuant to an established debarment procedure from bidding or contracting by any public body, agency of another state or agency of the federal government; and
  - g) the contractor failed to provide to the public body in a timely manner any information requested by the public body relevant to subdivisions a through f of this subsection.
- 9) In determining if a contractor has the “appropriate experience” to be prequalified, the Authority may consider and use specific minimum experience requirements established by the Executive Director or his designee for the specific project. The Authority may also consider the contractor’s past performance on the projects that provide its past experience to determine if the projects provide the appropriate experience required.
- 10) To the extent any provision in this process is deemed inconsistent with Virginia Code § [2.2-4317](#), whether due to amendment of that statutory provision or otherwise, then the provisions of Virginia Code § [2.2-4317](#) shall control as to such inconsistency.
- 11) The provisions of this process and its implementation are intended to be severable, and if any provision is deemed invalid, this shall not be deemed to affect the validity of other provisions.
- ~~12) This prequalification process does not apply to any procurement done under the Public-Private Education facilities and Infrastructure Act of 2002 (“PPEA”), Code of Virginia § [56-575.1](#), et seq., and is in no way intended to limit the Authority’s discretion in the way it selects contractors under PPEA.~~

~~13~~12) A determination that a contractor is prequalified does not necessarily preclude the Authority from determining that such contractor is not responsible following bid opening. Among other things, a change in circumstances or change in information, as well as different criteria allowed to be considered for prequalification versus responsibility, may lead to a different result. For example, a prequalified contractor that becomes debarred between prequalification and bid opening, or a contractor who is subsequently discovered not to have been totally candid in answering its prequalification questionnaire, might be deemed non-responsible.

~~14~~13) Prequalification of a contractor to bid on one project does not prequalify that contractor to bid on a different project or mean that the contractor will necessarily be deemed to be a responsible bidder for a different project.

~~15~~14) Neither the Prequalification Process nor its implementation by the Authority shall be deemed to create and contract right in any prospective contractor or to give any prospective contractor any right beyond that conferred by Code of Virginia § [2.2-4317](#). All prospective contractors shall be responsible for their own expenses in applying for prequalification, and the Authority shall have no liability for any such expense.

### XIII. BONDS

#### **Bid Bonds**

Except in cases of emergency or prequalification, all bids or proposals for non-transportation-related construction contracts in excess of \$500,000 shall be accompanied by a bid bond from a surety company selected by the bidder that is legally authorized to do business in Virginia. The specified amount of the bid bond shall not exceed five percent of the amount bid (*Code of Virginia*, § [2.2-4336](#)). ~~For non-transportation-related construction contracts in excess of \$100,000 but less than \$500,000, the bid bond requirements may be waived provided that prospective contractors shall be prequalified for each individual project in accordance with § 2.2-4317.~~ However<sup>[AA10]</sup>, the Authority may waive the requirement for prequalification of a bidder with a current Class A contractor license for contracts in excess of \$100,000 but less than \$300,000 upon a written determination made in advance by the Authority's governing body that waiving the requirement is in the best interests of the ~~the~~ Authority. The Authority shall not enter into more than 10 such contracts per year.

#### **Performance and Payment Bonds** (*Code of Virginia*, § [2.2-4337](#)<sup>[AA11]</sup>).

Unless otherwise authorized in this section, upon the award of any (i) public construction contract exceeding \$500,000 awarded to any prime contractor; (ii) construction contract exceeding \$500,000 awarded to any prime contractor requiring the performance of labor or the furnishing of materials for buildings, structures or other improvements to real property owned by the Authority, or (iii) construction contract exceeding \$500,000 in which the performance of labor or the furnishing of materials will be paid with public funds, the contractor shall furnish to the Authority the following bonds:

- 1) a performance bond in the sum of the contract amount conditioned upon the faithful performance of the contract in strict conformity with the plans, specifications and conditions of the contract;
- 2) a payment bond in the sum of the contract amount. The bond shall be for the protection of claimants who have and fulfill contracts to supply labor or materials to the prime contractor to whom the contract was awarded, or to any subcontractors, in furtherance of the work provided for in the contract, and shall be conditioned upon the prompt payment for all materials furnished or labor supplied or performed in the furtherance of the work; and
- 3) nothing in this section shall preclude the Authority from requiring payment or performance bonds for construction contracts below \$500,000 for non-transportation-related projects.

~~For non-transportation-related construction contracts in excess of \$100,000 but less than \$500,000, where the performance and payment bond requirements are waived, prospective contractors shall be prequalified for each individual project in accordance with § 2.2-4317.~~ However<sup>[AA12]</sup>, ~~T~~the Authority may waive the requirement for prequalification of a contractor with a current Class A contractor license for contracts in excess of \$100,000 but less than \$300,000 upon a written determination made in advance by the Authority's governing body that waiving the requirement is in the best interests of the Authority. The Authority shall not enter into more than 10 such contracts per year<sup>[AA13]</sup>.

#### **Bonds on Other Than Construction Contracts**

The Authority may require bid, payment, or performance bonds for contracts for goods or services if provided in the Invitation for Bids or Request for Proposal.



**Alternative Forms of Security**

A certified check, cashier's check or cash escrow may be accepted in lieu of a bid, payment, or performance bond in the face amount required for the bond. If approved by Authority's attorney, a bidder may furnish a personal bond, property bond or bank or savings institution's letter of credit on certain designated funds in the face amount required for the bid, payment, or performance bond. Approval shall be granted only upon a determination by the attorney that the alternative form of security proffered affords protection to the Authority equivalent to a corporate surety's bond. (*Code of Virginia*, § [2.2-4338](#)).

#### **XIV. WITHDRAWAL OF BIDS**

The Authority recognizes that errors can occur in bidding and has established procedures for withdrawal of bids for other than construction contracts and incorporates the procedure per § [2.2-4330](#) of the VPPA for withdrawal of a bid for a public construction contract, other than a contract for construction or maintenance of public highways, to provide a consistent and fair means of allowing a bidder to withdraw a bid due to error.

For construction contracts the Authority shall specify which procedure listed under paragraph B will be used in the Invitation for Bids.

##### **Procedure for withdrawal of a bid for other than a construction contract:**

A bidder for *other than a contract for construction* may withdraw a bid from consideration if the price was substantially lower than the other bids due solely to a mistake therein, provided the bid was submitted in good faith, and the Purchasing Agent, in his sole discretion, determines in writing that the mistake was a clerical mistake as opposed to a judgmental mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of the bid, or if the purchasing agent determines that it is in the best interest of the Authority to allow the withdrawal of the bid.

- 1) The bidder shall give notice in writing to the Purchasing Agent of a claim of right to withdraw a bid within two business days after the conclusion of the opening of the bids. The Purchasing Agent may, if there is sufficient cause to suspect an error exists, suggest that a bidder review a bid and offer an opportunity to withdraw the bid in question.
- 2) If the Purchasing Agent denies the withdrawal of a bid under the provisions of this section, he or she shall notify the bidder in writing stating the reasons for the decision.
- 3) No bid may be withdrawn under this section when the result would be to award the contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five percent (5%).
- 4) If a bid is withdrawn under the authority of this section, the lowest remaining bid shall be deemed to be the low bid.

**Withdrawal of a bid for a public construction contract**, other than a contract for construction or maintenance of public highways shall be in accordance with Virginia Code repeated below:

##### **VPPA**

###### **§ [2.2-4330](#) Withdrawal of bid due to error.**

A. A bidder for a public construction contract, other than a contract for construction or maintenance of public highways, may withdraw his bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake in the bid, provided the bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.

If a bid contains both clerical and judgment mistakes, a bidder may withdraw his bid from consideration if the price bid would have been substantially lower than the other bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.

B. One of the following procedures for withdrawal of a bid shall be selected by the Authority and stated in the advertisement for bids:

1. bidder shall give notice in writing of his claim of right to withdraw his bid within two business days after the conclusion of the bid opening procedure and shall submit original work papers with such notice; or

2. Where the Authority opens the bids one day following the time fixed for the submission of bids, the bidder shall submit to the public body or designated official his original work papers, documents and materials used in the preparation of the bid at or prior to the time fixed for the opening of bids. The work papers shall be delivered by the bidder in person or by registered mail. The bidder shall have two hours after the opening of bids within which to claim in writing any mistake as defined herein and withdraw his bid. The contract shall not be awarded by the Authority until the two-hour period has elapsed.

Under these procedures, the mistake shall be proved only from the original work papers, documents and materials delivered as required herein. The work papers, documents and materials submitted by the bidder shall, at the bidder's request, be considered trade secrets or proprietary information subject to the conditions of subsection F of § [2.2-4342](#).

C. The Authority may establish procedures for the withdrawal of bids for other than construction contracts (see A above).

D. No bid shall be withdrawn under this section when the result would be the awarding of the contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five percent.

E. If a bid is withdrawn in accordance with this section, the lowest remaining bid shall be deemed to be the low bid.

F. No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.

G. The Authority shall notify the bidder in writing within five business days of its decision regarding the bidder's request to withdraw its bid. If the Authority denies the withdrawal of a bid under the provisions of this section, it shall state in such notice the reasons for its decision and award the contract to such bidder at the bid price, provided such bidder is a responsible and responsive bidder. At the same time that the notice is provided, the Authority shall return all work papers and copies thereof that have been submitted by the bidder.

Bids can always be withdrawn at any time before the time specified for opening.

## **XV. SOLE SOURCE<sup>[AA14]</sup>**

Competitive procedures are waived when a determination is made that the goods or services required are practicably available from only one source. The procurement record for a sole source procurement must include the appropriate approval in support of the action to forego the competitive process and be posted to the Authority's website identifying that which is being procured, the contractor selected, and the date of the decision.

Negotiations for a sole source contract or purchase order award may commence without providing for full and open competition only after the Purchasing Agent justifies the use of such actions in writing, certifies the accuracy and completeness of the justification, and obtains any required approvals. A justification must contain sufficient facts and rationale to justify the use of the sole source method. In making this determination, the Purchasing Agent shall determine whether there is, in fact, only one vendor practicably available to provide the goods and services. Prior to making a determination, the Purchasing Agent may conduct their own investigation, request additional information or consult with the Authority's attorney. If the request is denied the normal procurement procedures will be followed.

Before awarding any sole source procurement, the proposed price must be determined to be fair and reasonable using the method most appropriate to the procurement.

### **VPPA**

#### **§ [2.2-4303](#) Methods of procurement.**

E. Upon a determination in writing that there is only one source practicably available for that which is to be procured, a contract may be negotiated and awarded to that source without competitive sealed bidding or competitive negotiation. The writing shall document the basis for this determination. The public body shall issue a written notice stating that only one source was determined to be practicably available, and identifying that which is being procured, the contractor selected, and the date on which the contract was or will be awarded. This notice shall be posted on the Department of General Services' central electronic procurement website or other appropriate websites, and in addition, public bodies may publish in a newspaper of general circulation on the day the public body awards or announces its decision to award the contract, whichever occurs first. Posting on the Department of General Services' central electronic procurement website shall be required of any state public body. Local public bodies are encouraged to utilize the Department of General Services' central electronic procurement website to provide the public with centralized visibility and access to the Commonwealth's procurement opportunities.

## **XVI. EMERGENCY**

Reasonable steps shall be taken to avoid using non-competitive emergency procurement methods. An emergency situation occurs when the failure to acquire the goods, services, or construction in a timely manner would seriously threaten the health or safety of any person; the preservation or protection of property; the continuation of necessary Authority functions; or the Authority's compliance with legal requirements.

Parts or services greater than \$10,000 when time or other circumstance does not permit full review may be classed an emergency if so approved by the Executive Director or the Purchasing Agent. For parts and services \$10,000 and less the Small Purchase Procedure shall apply.

For an emergency purchase the employee responsible should find an appropriate source and then direct the vendor to proceed. Even in an emergency, the procurement shall be made with such competition as is practicable under the circumstances, obtaining a fair and reasonable price, and documenting the procurement action. In an emergency, competition is not necessarily limited to cost. Since immediate action is required, factors such as delivery, availability and response time can be more critical than cost. By definition, an emergency purchase should immediately address the problem. Emergency procurements must be limited to only the emergency procurement need. Additional goods and services not needed for the emergency procurement are not allowed.

When placing an emergency order, the following information must be obtained from the vendor and entered on a confirming requisition to be sent to the Purchasing Agent:

- 1) accurate prices if possible (for services this may be hourly rates for services and equipment);
- 2) payment terms;
- 3) method of shipment (Ship Via);
- 4) delivery date or completion date (the purchase must ***immediately*** address the problem so this should not be in terms of weeks or months);
- 5) accurate FOB point;
- 6) how ordered (by telephone, email, fax, etc.);
- 7) first and last name of vendor representative who accepts the order; and
- 8) obtain a written quote (email or fax is acceptable) if possible.

On the requisition clearly indicate that this is a "Confirming Telephone Order (or email or fax)" complete with:

- a) the date the order was phoned in;
- b) the name of the person at the company accepting the order;
- c) the name of the departmental personnel placing the order; and
- d) details of all other quotes solicited and/or received.

Include with the requisition an explanation of:

- a) the emergency, stating the urgent nature of the emergency;
- b) the reasons this vendor was selected; and

c) all details of the agreement made with the vendor.

The Purchasing Agent will review the transaction and process the requisition through normal channels. If goods or services have been ordered or received, no purchase order will be issued. The requisition will be submitted to the appropriate director for review.

Emergency procedures may be utilized only to purchase the goods or services necessary to address the emergency. Subsequent requirements shall be obtained using normal purchasing procedures. The emergency purchase procedure is not intended to be used to cover inadequate planning or control or to bypass the normal procedure.

The Authority shall issue a written notice stating that the contract is being awarded on an emergency basis, identifying that which is being procured, the contractor selected, and the date on which the contract was or will be awarded. This notice shall be posted on the Authority website.

**VPPA**

**§ 2.2-4303. Methods of procurement.**

F. In case of emergency, a contract may be awarded without competitive sealed bidding or competitive negotiation; however, such procurement shall be made with such competition as is practicable under the circumstances. A written determination of the basis for the emergency and for the selection of the particular contractor shall be included in the contract file. The public body shall issue a written notice stating that the contract is being awarded on an emergency basis, and identifying that which is being procured, the contractor selected, and the date on which the contract was or will be awarded. This notice shall be posted on the Department of General Services' central electronic procurement website or other appropriate websites, and in addition, public bodies may publish in a newspaper of general circulation on the day the public body awards or announces its decision to award the contract, whichever occurs first, or as soon thereafter as is practicable. Posting on the Department of General Services' central electronic procurement website shall be required of any state public body. Local public bodies are encouraged to utilize the Department of General Services' central electronic procurement website to provide the public with centralized visibility and access to the Commonwealth's procurement opportunities.

## **XVII. USE OF STATE AND OTHER COOPERATIVE CONTRACTS AND JOINT PROCUREMENTS**

The Authority may participate in, sponsor, conduct, or administer a joint procurement agreement on behalf of or in conjunction with one or more other public bodies, or public agencies or institutions or localities of the several states, of the United States or its territories, the District of Columbia, the U.S. General Services Administration, or the Metropolitan Washington Council of Governments, for the purpose of combining requirements to increase efficiency or reduce administrative expenses in any acquisition of goods, services, or construction (VPPA § [2.2-4304.A](#)).

The Authority may from time to time participate in, sponsor, conduct, or administer a cooperative procurement agreement with one or more public bodies for reasons of efficiency and/or cost savings in accordance with the VPPA § [2.2-4304.B](#).

The most commonly used cooperative contracts are state contracts, including:

- 1) [Virginia State Contracts](#);
- 2) [Virginia Information Technology Agency Contracts](#);
- 3) Virginia Office of Fleet Management [Fuel Programs](#);
- 4) [Division of Engineering and Buildings](#); and
- 5) Other Virginia localities and authorities.

The Authority may purchase from another public body's contract or from the contract of the Metropolitan Washington Council of Governments or the Virginia Sheriffs' Association even if it did not participate in the request for proposal or invitation to bid, if the request for proposal or invitation to bid specified that the procurement was a cooperative procurement being conducted on behalf of other public bodies, except for:

- a) contracts for architectural or engineering services; or
- b) construction, except for the installation of artificial turf and track surfaces, including all associated and necessary construction, which shall not be subject to the limitations prescribed in this subdivision.

Consistent<sup>[AA15]</sup> with applicable federal regulations and provided the terms of the contract permit such purchases, the Authority may purchase goods and nonprofessional services from a U.S. General Services Administration [Multiple Award Schedule](#) contract. ~~Under the [GSA Cooperative Purchasing Program](#) GSA Cooperative Purchasing Program, GSA the Authority may purchase certain Information Technology and Security, Fire, and Law Enforcement products and services under certain Special Item numbers contained within makes available GSA Schedules 70 and 84. GSA Schedules [General Categories: "Information Technology"](#) and 70 is available for the acquisition of Information Technology goods and services, "Security and Protection" and Schedule 84 contracts are available for the acquisition of security, fire and law enforcement equipment, as well General Categories "Facilities", "Industrial Products and Services", "Miscellaneous", "Scientific Management and Solutions", and Transportation and Logistics Services. Note that some GSA contracts are pre-qualification lists with the direction to compete amongst those vendors that have been prequalified, so a procurement process may still be required. Follow the direction of the specific GSA schedule. [The following language must be included on any order or request for quote: "This order or RFQ is placed under the Cooperative Purchasing program. Include your GSA MAS contract number on your quote."](#)~~

If a vendor recommends a cooperative contract to you, the Purchasing Agent should be consulted to ensure the contract is in compliance with all legal requirements and can be used by the Authority.

The Authority will generally be responsible for contracting directly with the vendor under cooperative contracts.

## XVIII. PURCHASE REQUISITION

A requisition is a request for goods or services necessary for the day to day operation of a department. It is to be filled in COMPLETELY as shown below and sent to Purchasing. Be sure you allow adequate time for processing, ordering and shipping. The requisition is used to collect all information to support the issuance of the Purchase Order described in Section XX.

All purchases over \$10,000 [SJJ16] must be placed on a purchase requisition. Requisitioned purchases are reviewed for appropriateness, required approvals, and funds availability.

All requisitions must be approved by the department director, their delegate or the Purchasing Agent before a purchase order is prepared:

- 1) Director of ~~Administration~~/Finance/IT, approving director for:
  - a) Administration Department; and
  - b) Information Systems Department
- 2) Director of Engineering and Maintenance, approving director for:
  - a) Engineering Department; and
  - b) Maintenance Department
- 3) Director of Operations, approving director for:
  - a) Laboratory Department;
  - b) Wastewater Department; and
  - c) Water Department
- 4) Executive Director, approving director for:
  - a) Solid Waste Operations; and
  - b) Recycling Operations

### **Purchase Requisition Instructions:**

- 1) **Requester:** person to contact for further information
- 2) **Date:** date requisition is completed
- 3) **For:** facility and what used for or on
- 4) **Budget Acct:** account from which payment is to be made
- 5) **Vendor Information:** if you have received quotes and selected a vendor put all pertinent information on the selected vendor – legal name, address, contact name, phone number, fax number and email address. If this has been purchased from a vendor before, if you know where it's available or if you've talked about it to a particular vendor, put that vendor's name here or list under Vendor Research below or attach a separate sheet.
- 6) **Vendor Data:** indicate the appropriate box and provide detail if either Only Source or Best Vendor (and not the lowest cost) and provide reasons under Vendor Research or attach an additional sheet.



- 7) **Quantity:** how many of what unit such as each (ea), dozen (dz), pounds (lbs), square feet (sf), square yards (sy) etc.
- 8) **Part number:** any identification, from catalog, parts list, manual or the like. Indicate source of information. If known provide the serial number here.
- 9) **Description:** Fill in with the most complete description possible including size, color, manufacturer, model number, special requirements.
- 10) **Unit Cost:** price per unit
- 11) **Total Cost:** total cost for that line item
- 12) **Vendor Research:** If you have received quotes and selected a vendor put all pertinent information on the selected vendor and information on the solicitations and, if applicable, attach all written quotes. If Purchasing is soliciting bids/proposals and this has been purchased from a vendor before, if you know where it's available or if you've talked about it to a particular vendor, put that vendor's name here. If there are multiple possible sources available attach a separate sheet
- 13) Approved, Verified, Purchase Order # and date will be completed by the Purchasing Agent

Confirming requisitions are to be used after an emergency purchase of goods or services.

## **XIX. SPECIFICATIONS**

### **Purpose**

To describe as completely and accurately as reasonably possible the goods or services required and to allow purchase of those goods or services on a competitive basis with the goal that the Authority receives the best value for the level of quality required.

The Virginia Public Procurement Act [§2.2-4300](#) (C) requires “that specifications reflect the procurement needs of the purchasing body rather than being drawn to favor a particular vendor” and that “all procurement procedures be conducted in a fair and impartial manner” and “that rules governing contract awards be made clear in advance of competition”. Specifications must be written to allow for competitive bids and not to arbitrarily exclude a particular firm or product. They're written so as to promote competition.

### **Preparation**

Specifications are developed by purchasing staff with the assistance of the other Authority staff, vendors, other agencies, and other resources. [Comment concerning specifications or other provisions in Invitations to Bid or Requests for Proposal can be received and considered prior to the time set for receipt of bids or proposals or award of the contract](#)<sup>[AA17]</sup>. Contact with prospective contractors is allowed to learn industry capabilities but care must be taken to not use information provided to create a proprietary non-competitive specification. Also, no person who, for compensation, prepares an Invitation to Bid or Request for Proposal for or on behalf of the Authority shall:

- 1) submit a bid or proposal for that procurement or any portion thereof; or
- 2) disclose to any bidder or offeror information concerning the procurement which is not available to the public.

However, the Authority may permit such person to submit a bid or proposal for that procurement or any portion thereof if Authority, in writing, determines that the exclusion of such person would limit the number of potential qualified bidders or offerors in a manner contrary to the best interests of the Authority (*Code of Virginia*, § [2.2-4373](#)).

Specifications and purchase descriptions shall state Authority needs in a manner designed to promote full and open competition or maximum practicable competition based on the nature of the goods and services including construction being procured.

To the maximum practicable extent requirements should be stated in terms of:

- 1) functions to be performed;
- 2) performance required; or
- 3) essential physical characteristics.

Requirements should be defined in terms that enable and encourage the offer of commercial items to the extent that commercial items that meet Authority needs are available.

The Authority may describe a requirement by use of a brand name. Unless otherwise provided in the solicitation, the name of a certain brand, make or manufacturer does not restrict bidders to the specific brand or manufacturer named. The brand name description shall be used only when adequate specifications or a more detailed purchase description cannot be reasonably employed. When using a brand name or equal purchase description, the description shall also list the salient characteristics and minimum acceptable features. Restrictive provisions or conditions may be used only to the extent necessary to satisfy Authority needs. Any article that the public body in its sole discretion determines to be the equal of that specified, considering quality, workmanship, economy of operation, and

suitability for the purpose intended, shall be accepted. If the Authority justifies, in writing, use of a brand name only specification, then state as “brand name-no substitute.”

## **XX. PURCHASE ORDER**

The purchase order is a legal contract between the Authority and the vendor specified to deliver the goods or services. The vendor is to deliver the goods or services specified at the quoted prices and the Authority is obligated to pay the amount shown in the time specified.

A purchase order is prepared from an approved requisition (see Section XVII.) after all necessary information has been obtained by one of the purchase methods previously outlined and after the availability of funds has been verified. Purchase orders are assigned by the Purchasing Agent or Accounts Payable/Purchasing Technician and are valid only when signed by the Purchasing Agent or his/her designee.

The purchase order is distributed as follows:

- 4) **Email to Requester:** Should be checked against requisition immediately upon receipt to insure that goods or services ordered are as requested. To be used as reference when receiving and inspecting goods or approving service performance. It is also to be used to acknowledge receipt of the goods or performance of the service and returned for payment processing with packing tickets attached to ultimately be filed in vendor files
- 5) **Email to Vendor:** This is the vendor's authorization to ship as specified.
- 6) **Saved to DocLink with Required Documents Attached:** Retained as permanent record. Provides reference for order, record of receipt and vendor performance.

## **XXI. CHANGE ORDER & CONTRACT MODIFICATIONS**

Any modification in a purchase order or contract requires issuance of a change order. This is legal authorization for the change to be made by the vendor and for the Authority to accept and pay for goods or services that vary from those originally ordered.

To change a purchase order a requisition is required specifying the change required and authorized, whether it be to the quantity, specification or price. The requisition should be clearly marked "Change to Purchase Order Number \_\_\_\_". A purchase order is then prepared as before except that it will indicate that it is a change order. The body of the order will explain the purpose of the change order. If a price change is involved it will show an "adjusted net total". It will, in the body, reflect the change made whether to quantity, delivery or price requisition in the case of a purchase order.

Where a formal contract exists, a change order or contract modification request form, with appropriate approvals, is required for the issuance of a change order or contract modification. All change orders and contract modifications must be approved and issued by the Purchasing Agent, Executive Director or the Board of Directors as required below.

ALL CHANGES TO A CONTRACT MUST BE IN WRITING. This provides legal authority for the change and also provides a record of the history of the delivery/performance for future reference.

A contract may include provisions for modification of the contract during performance, but no fixed-price contract may be increased by more than the allowable increase specified in the VPPA, § [2.2-4309](#), without the advance written approval of the Board of Directors. This limitation applies to the aggregate change orders in a contract. The term of an existing contract may be extended for services to allow completion of any work undertaken but not completed during the original term of the contract.

### **VPPA**

#### **§ [2.2-4309](#). Modification of the contract.**

- A. A public contract may include provisions for modification of the contract during performance, but no fixed-price contract may be increased by more than twenty-five percent of the amount of the contract or \$50,000, whichever is greater, without the advance written approval of the governing body. In no event may the amount of any contract, without adequate consideration, be increased for any purpose, including, but not limited to, relief of an offeror from the consequences of an error in its bid or offer.
- B. Any public body may extend the term of an existing contract for services to allow completion of any work undertaken but not completed during the original term of the contract.
- C. Nothing in this section shall prevent any public body from placing greater restrictions on contract modifications.
- D. The provisions of this section shall not limit the amount a party to a public contract may claim or recover against a public body pursuant to § 2.2-4363 or any other applicable statute or regulation. Modifications made by a political subdivision that fail to comply with this section are voidable at the discretion of the governing body, and the unauthorized approval of a modification cannot be the basis of a contractual claim as set forth in § 2.2-4363.

## XXII. PROCUREMENT UNDER ASSISTANCE AGREEMENTS

Procurements funded with federal, state, or local funds, shall be guided by the Purchasing Manual except as necessary to conform to the requirements of the funding source, provided that such conformance does not violate the terms and conditions of other applicable federal, state, or local laws.

Under the Virginia Public Procurement Act, Article 3, Exemptions and Limitation, § [2.2-4343](#) the Authority is authorized to conform to mandatory conditions on Federal grants or contracts that are in conflict with the Act if the Board of Directors determines in writing that such conformation is in the public interest. The specific provision of the Act conflicting with the special conditions shall be identified.

No such conflict is yet apparent in the Environmental Protection Agency's Procurement under Assistance Agreements (40 CFR Part 33) with which the Authority must comply as a condition of receiving EPA State Revolving Loan funds. Therefore, the Agreements are regarded for the purposes of compliance as a part of this Manual. The Agreements in certain circumstances generally place more stringent procurement requirements upon the Authority for certain circumstances than does the Procurement Act.

### VPPA

#### § [2.2-4343](#). Exemption from operation of chapter for certain transactions.

(B) Where a procurement transaction involves the expenditure of federal assistance or contract funds, the receipt of which is conditioned upon compliance with mandatory requirements in federal laws or regulations not in conformance with the provisions of this chapter, a public body may comply with such federal requirements, notwithstanding the provisions of this chapter, only upon the written determination of the Governor, in the case of political subdivisions, that acceptance of the grant or contract funds under the applicable conditions is in the public interest. Such determination shall state the specific provision of this chapter in conflict with the conditions of the grant or contract.

## **XXIII. DISADVANTAGED BUSINESS PROGRAM**

### **Purpose**

By adoption of this program the Authorities affirm their policy to make every reasonable effort to maintain and increase opportunities for small, minority and women owned businesses, micro businesses and businesses owned by service-disabled veterans to participate in Authority purchasing activities.

### **Definitions**

Minority individual means an individual who is a citizen of the United States or a legal resident alien and who satisfies one or more of the following definitions:

- 1) "African American" means a person having origins in any of the original peoples of Africa and who is regarded as such by the community of which this person claims to be a part.
- 2) "Asian American" means a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, including but not limited to Japan, China, Vietnam, Samoa, Laos, Cambodia, Taiwan, Northern Mariana, the Philippines, a U.S. territory of the Pacific, India, Pakistan, Bangladesh, or Sri Lanka and who is regarded as such by the community of which this person claims to be a part.
- 3) "Hispanic American" means a person having origins in any of the Spanish-speaking peoples of Mexico, South or Central America, or the Caribbean Islands or other Spanish or Portuguese cultures and who is regarded as such by the community of which this person claims to be a part.
- 4) "Native American" means a person having origins in any of the original peoples of North America and who is regarded as such by the community of which this person claims to be a part or who is recognized by a tribal organization.

A minority-owned business means a business that is at least 51% owned by one or more minority individuals who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals who are U.S. citizens or legal resident aliens, and both the management and daily business operations are controlled by one or more minority individuals.

A women-owned business means a business that is at least 51% owned by one or more women who are U.S. citizens or legal resident aliens, or in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are U.S. citizens or legal resident aliens, and both the management and daily business operations are controlled by one or more women.

A small business means a business, independently owned and controlled by one or more individuals who are U.S. citizens or legal resident aliens, and together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years. One or more of the individual owners shall control both the management and daily business operations of the small business<sup>[AA18]</sup>.

A micro business means a certified Small Business under the SWaM Program and together with its affiliates has no more than twenty-five (25) employees AND no more than \$3 million in average annual revenue over the three-year period prior to their certification<sup>[AA19]</sup>.

Service-disabled veteran means a veteran who (i) served on active duty in the United States military ground, naval, or air service, (ii) was discharged or released under conditions other than dishonorable, and (iii) has a service-connected disability rating fixed by the United States Department of Veterans Affairs.

A service disabled veteran business means a business that is at least 51% owned by one or more service disabled veterans or, in the case of a corporation, partnership, or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more individuals who are service disabled veterans and both the management and daily business operations are controlled by one or more individuals who are service disabled veterans.

### **Policy**

The Authorities through their employees and agents shall make reasonable efforts to increase and maintain opportunities for small, minority, micro, service-disabled veterans and women owned businesses to participate in Authority purchasing procedures. All such efforts shall be consistent with all local, state, and federal laws and regulations and with the other sections of this Purchasing Manual. The following are examples of actions the Authority shall take to promote purchasing of facilities, equipment, materials, supplies and services from disadvantaged businesses:

- 1) assuring such businesses are included on bidder's lists;
- 2) assuring solicitation of such businesses when appropriate;
- 3) dividing purchases when economically feasible to promote broader participation;
- 4) establishing delivery schedules whenever feasible to encourage broader participation;
- 5) using the services of the Small Business Administration, the Office of Minority Business Enterprise, local professional and business organizations, and other groups to help promote participation of such businesses; and
- 6) requiring prime contractors to take such affirmative action steps when letting subcontracts.

### **Responsibilities**

Responsibilities for development, implementation, and management of this program rest with the Purchasing Agent, who shall:

- 1) develop means to ensure inclusion of disadvantaged businesses on Authority bidder lists and to ensure they have open opportunity to compete for purchasing contracts;
- 2) develop and maintain lists of disadvantaged businesses for prime contractor use;
- 3) develop a system to monitor program effectiveness;
- 4) plan and conduct training seminars as necessary for disadvantaged businesses; and
- 5) participate when able to in small and/or minority, service-disabled veteran or female owned business purchasing exhibitions.



## **Procedures**

Authority purchasing staff shall follow these procedures as a minimum effort to implement this program:

- 1) provide copies as requested of RFP's and IFB's;
- 2) remain open and cooperative in answering questions regarding the program;
- 3) encourage disadvantaged businesses to compete for Authority purchases; and
- 4) review bid and proposal specifications to ensure they protect the Authority's interests and conform to legal requirements without unnecessarily restricting disadvantaged firms from bidding or proposing.

## **XXIV. DISPOSAL OF SURPLUS PROPERTY**

From time to time the Authority may choose to dispose of surplus property that is either in excess of requirements, no longer used, obsolete, worn out, or scrapped. The Purchasing Agent shall use his/her best judgment to dispose of surplus property by one of the following means:

Surplus materials mean personal property including, but not limited to, materials, supplies, equipment, and recyclable items, but does not include property as defined in Code of Virginia, § 2.2-1147 (real property or real estate), that is determined to be surplus.

Surplus property must be handled carefully and stored properly, in a manner that minimizes breakage or damage from rough handling, improper stacking, excessive wear, or inappropriate storage outside that exposes property to weather, or any other poor storage condition. Surplus property, including recyclable materials, shall NOT be taken for personal use or personal sale by any Authority employee.

### **Methods of Disposal**

**Sales/Transfers to Governmental Institutions:** Sales may be made to governmental entities at the item's fair market value. Occasionally, a no-cost transfer is appropriate, for example, to facilitate a cooperative program between governmental institutions. Donations of surplus property may be utilized for items which remain unsold after a public sale or when the cost of handling the sale would exceed expected returns. Donations will only be authorized for governmental entities and non-profits providing services to the local community. A donation or no-cost transfer shall be approved by the Executive Director. Sales to other public bodies are not governed by the VPPA.

**Competitive Sealed Bidding:** Property may be sold by competitive sealed bidding on an individual item or lot basis. Advertisements may be posted on the Authority's Bid Board, in newspapers, web sites, and/or solicitations are sent to persons or firms on bidder's lists maintained by the Purchasing Agent.

**Department of General Services Office of Surplus Property Management:** The Authority is authorized to use the services or facilities of the Commonwealth's DGS/OSPM to dispose of their surplus property, pursuant to the OSPM policies, procedures, and guidelines. For questions or information about the disposal of surplus property contact the Director, DGS/OSPM at (804) 236-3675 or email [statesurplus@dgs.virginia.gov](mailto:statesurplus@dgs.virginia.gov) with a description of their surplus material. Proceeds from the sale of the surplus property shall be returned to the Authority minus a service fee. The service fee charged by the Department shall be consistent with the fee charged by the Department to state public bodies.

**Advertisement for a fixed price:** The sale price shall be at fair market value. Sale shall be advertised to the public and notices may be sent to persons or firms known to be interested in the sale. Procedures must be established for sale on a "first come - first served" basis such as a sale at designated location and specific time when sale shall be open to the public.

**Fixed price sale:** Surplus property may be offered to the public at a set- or fixed-price with approval of the Executive Director. The sales price of an item is based on known sales experience and/or assessed current market value. Generally, set-price sales should be publicly advertised at least a week in advance including the procedures established for the sale.

**Negotiated Sale:** Under exceptional circumstances, surplus property may be sold through negotiation, such as when property has not been sold despite efforts of public sales, or where timely removal from the department's premises is crucial.

**On-line Public Auctions:** Property may be sold through internet on-line auctions, which generally allows items to remain at the Authority while posted for sale. Surplus items may be sold through a contracted on-line auction vendor or through the Commonwealth's DGS/OSPM Division which has contracted with a vendor for on-line auction sales.

**Live Public Auction:** A live advertised public auction may be conducted if sufficient surplus property exists and the value is sufficient to justify the expenses and labor including the fee paid for advertising and an auctioneer. The auctioneer should be obtained using the required procurement procedures based on the expected fee or through an available cooperative agreement.

**Recycling:** Recycling of eligible unsold surplus property such as computer monitors, large amounts of surplus paper products, etc. is strongly encouraged.

**Spot Bid:** For the disposal of scrap materials such as aluminum, steel, brass, copper wire, etc., the spot bid procedure may be used for selling items. This procedure involves contacting buyers on an informal basis to determine the best price under the current market conditions. Use of this method streamlines the disposal effort and eliminates storage of items until a sufficient quantity is available for competitive sealed bidding. The Spot Bidding procedure is also authorized for the Authority's sale of recyclable material received at solid waste centers including the McIntire Recycling Center.

**Trade-ins:** Obsolete, worn out, inactive, or uneconomical operating equipment may be traded in on the purchase of new equipment. Trade-in procedures should not be used if the monetary allowance offered is substantially below the known current sales price less expected administration costs associated with other disposal options. Items for trade-in must be fully described on the requisition and purchase order with the trade-in allowance shown on the purchase order. Authority property may not be used as credit on future purchases or to pay for a service provided to the Authority.

**Computers and other information technology (IT) Assets including copiers:** The state has a contract available to public bodies for the provision of Secure Data Destruction and Recycling Services available on the Virginia Information Technology (VITA) website. Prior to the disposal, regardless of the method used, sale, trade, recycling or any other transfer of computers or other IT assets, the Purchasing Agent must ensure that all hard drives or other sources of secure data or any other confidential Authority data or personal identifying information of employees have been removed.

**Disposition and Accountability of Federally Funded Property:** Disposition of any material or equipment purchased with Federal Funds must be accounted for in accordance with current Federal regulations.

**Purchases by Authority Employees and Their Families.**

Except within the limits noted below, the *Code of Virginia*, § [2.2-3100 et seq](#) [of [AA20]] the Conflict of Interests Act prohibits employees and their immediate family from engaging in certain transaction with a public employer, including purchasing surplus property valued at over \$500. An employee's immediate family includes a spouse, children, parents, brothers and sisters, and any other person living in the same household as the employee. A \$500 limit to purchasing surplus property applies to surplus

property sales, such as auctions or internet sales even if the buyer works for a different agency than the selling agency unless the property is purchased in any sale of surplus property at uniform (fixed) prices that are available to the public. Employees of the Authority should not purchase property if they influence the maintenance, surplus designation, pricing or disposition of the property item.

## **XXV. DEBARMENT OF PROSPECTIVE CONTRACTORS**

### **General**

The Purchasing Agent may, in the public interest and consistent with § [2.2-4321](#) of the VPPA, Debarment, debar a prospective contractor (including a prospective subcontractor, supplier, insurer or surety) for any of the causes listed in section 1 below, using procedures described in section 2. The existence of a cause for debarment under section 1, however, does not necessarily require that the contractor be debarred. The seriousness of the contractor's acts or omissions and any mitigating factors should be considered in making any debarment decision. When debarment occurs, such debarment shall be considered to be just cause for cancellation of any existing contracts held by the person or business debarred.

### **1) Causes**

The purchasing agent may, after consulting with the Authority's attorney, debar a prospective contractor for any of the following causes:

- a) Conviction of, or civil judgment establishing the contractor's:
  - i. commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public contract or subcontract;
  - ii. commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;
  - iii. commission of any other offense indicating a lack of business integrity or business honesty that seriously and directly affects the present responsibility of the prospective contractor;
  - iv. failing to disclose a condition constituting a conflict of interest by any officer, director, owner, partner, or agent of the vendor in a contract or purchase order awarded by Authority;
  - v. conviction under state or federal antitrust statutes arising out of the submission of bids or proposals; or
  - vi. conviction of any officer, director, owner, partner, or agent of the vendor of any criminal offense involving public contracting.
- b) Violation of the terms of a government contract or subcontract so serious as to justify debarment, such as (but not limited to) willful failure to perform in accordance with the terms of one (1) or more contracts, or a history of failure to perform, or of unsatisfactory performance of one (1) or more contracts.
- c) Debarment by a federal, state or local government, a public authority, or other agency or entity subject to public procurement laws and requirements.
- d) Any other cause of so serious or compelling a nature that it affects the present responsibility of a government contractor or subcontractor.

### **2) Debarment Procedures**

The following procedures governing the debarment decision-making process are designed to be as informal as practicable, consistent with principles of fundamental fairness:

- a) Notice to contractor.

i. Debarment shall be initiated by advising the prospective contractor, by hand-delivery or by certified mail, return receipt requested, that debarment is being considered. Such notice shall include the reasons for the proposed debarment in terms sufficiently detailed to put the contractor on notice of the conduct or transaction(s) upon which the debarment is based, and shall identify the specific period of debarment under consideration. Unless a response is received from the prospective contractor within ten (10) working days of the date of this notice, the Purchasing Agent's decision shall be final. For the purposes of this subsection the "date of the notice" shall be deemed to be the date on which the notice is hand-delivered to the contractor or is deposited in the United States Mail.

b) Opportunity of contractor to respond.

i. The prospective contractor or his authorized representative may submit to the purchasing agent, in writing, and within ten (10) working days of the date of the notice described in subparagraph 3(a), any information or argument that the contractor deems relevant to the proposed debarment, including, without limitation, any specific information that raises a genuine dispute as to a fact that is material to the purchasing agent's findings or conclusions. Following timely receipt of information from the contractor, the purchasing agent shall review the proposed debarment and shall, within ten (10) working days thereafter, render a final determination. During the ten-day review period, the prospective contractor shall provide the purchasing agent with such additional information as he may request in order to complete his review of the proposed debarment.

**3) Appeals**

A decision to debar or suspend shall be final and conclusive, unless the debarred or suspended person within five (5) working days after receipt of the decision protests the decision in writing to the Executive Director. The Executive Director shall issue a decision in writing within ten (10) working days after receipt of the protest stating the reasons for the action taken. This decision shall be final unless legal action as provided for in § [2.2-4364](#) Code of Virginia is taken within ten (10) working days of the Executive Director's decision.

**2) Notice of Decision**

A copy of the decision to debar or suspend shall be mailed or otherwise furnished immediately to the debarred or suspended person, with a copy to the Executive Director.

**3) Period of Debarment**

A debarment shall be and remain effective for a period commensurate with the seriousness of the cause, as determined by the purchasing agent in his discretion, but shall not exceed three (3) years or for the length of the contract upon which debarment is based, whichever is longer.

## **XXVI. VENDOR APPEALS PROCEDURE**

While the Authority is authorized in § [2.2-4365](#) of the VPPA, to “establish an administrative procedure for hearing (i) protests of a decision to award or an award, (ii) appeals from refusals to allow withdrawal of bids, (iii) appeals from disqualifications and determinations of non-responsibility, and (iv) appeals from decisions on disputes arising during the performance of a contract, or (v) any of these” the Authority has determined that the Virginia Public Procurement Act and the courts provide adequate review and remedies of Authority procurement practices. Therefore, no other administrative appeals procedure has been established.

**Any inquiring vendors should be directed to the Virginia Public Procurement Act, Article 5, Remedies, and their contract or purchase order if applicable.**

## XXVII.

## GLOSSARY OF COMMONLY USED TERMS

### **available funds**

The term Available Funds means that the authority has or shall have the funds available for the project. This includes existing approved budget and additional funds approved by the Authority for potential use prior to entering into negotiations with the lowest responsible bidder

### **bid bond**

An insurance agreement in which a third party agrees to be liable to pay a certain amount of money in the event a selected bidder fails to accept the contract as bid.

### **brand name or equal specification**

A specification limited to one or more items by manufacturers' names or catalogue numbers to describe the standard of quality, performance, and other salient characteristics needed to meet requirements and which provides for the submission of equivalent products.

### **business**

Any type of corporation, partnership, limited liability company, association, or sole proprietorship operated for profit.

### **change order (unilateral)**

A written order signed and unilaterally issued by the Authority directing any contractor to make changes which the "changes" clauses of the contract authorizes the Authority to order without the consent of the contractor.

### **claim**

A written assertion or demand, by one of the parties to a contract, which seeks, as a contractual right, payment of money, adjustment of contract terms, or other relief, for injury, loss, or damage arising under or relating to the contract.

### **competitive negotiation**

A method for purchasing goods and services, usually of a complex and technical nature whereby qualified individuals or firms are solicited by

means of a Request for Proposals (RFP). Negotiations are conducted with selected offerors and the best proposal, as judged against criteria contained in the Request for Proposals, is accepted and an award issued.

### **competitive sealed bidding**

The offer of firm bids by individuals or firms competing for a contract, privilege, or right to supply specified services or goods bid submitted in a sealed envelope to prevent disclosure of its contents before the deadline set for the receipt of all bids. Competitive sealed bidding shall not be used to contract for professional services.

### **construction**

Construction shall mean building, altering, repairing, improving or demolishing any structure, building or highway, and any draining, dredging, excavation, grading or similar work upon real property;

### **contract**

An agreement enforceable by law, between two or more competent parties, to do or not to do something, not prohibited by law, for a consideration. A contract is any type of agreement or order for the procurement of goods or services.

### **contract modification**

Any written alteration in specifications, delivery point, rate of delivery, period of performance, price, quantity, or other provision of any contract accomplished by mutual action of the parties of the contract.

### **contractor**

Any person having a contract with the Authority.

### **cooperative procurement**

A procurement by a public body with one or more other public bodies, for the purpose of combining requirements for the purchase of like goods and/or services in order to increase efficiency and/or reduce administrative expenses.

### **direct or indirect participation in procurement process**

Involvement through decision, approval, disapproval, recommendation, preparation of any part of a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity.

### **disadvantaged business**

A business which is owned or controlled by a majority of persons, not limited to members of minority groups, who have been deprived of the opportunity to develop and maintain a competitive position in the economy because of social disadvantages.

### **F.O.B. (free on board)**

Term designating ownership of shipped goods and assigning liability for freight costs and damaged or lost goods. Most commonly used are:

- a) *Shipping Point* - Prepay and Add: title of goods passes to buyer when goods leave vendors' dock, buyer is liable for loss or damage in transit; seller pays freight costs and adds to invoice
- b) *Destination* - Prepaid and allowed: title passes to buyer upon receipt; seller is liable for loss or damage in transit; seller pays freight costs; preferred

### **governing body**

The Board of Directors.

### **immediate family**

A spouse, children, parents, brothers and sisters, and any other person living in the same household as the employee.

### **informality**

A minor defect or variation of the bid or proposal from the exact requirements of the Invitation for Bids or the Request for Proposals, which does not affect the price,



quality, quantity, or delivery schedule for the goods, services or construction being procured.

**invitation for bids**

A document, containing or incorporating by reference the specifications or scope of work and all contractual terms and conditions, that is used to solicit written bids for a specific requirement for goods or nonprofessional services.

**late bid or proposal**

A bid or proposal which is received at the place designated in the Invitation for Bids or Request for Proposals after the deadline established by the solicitation.

**liquidated damages**

A sum stated in a contract to be paid as ascertained damages for failure to perform in accordance with the contract. The damage figure stipulated must be a reasonable estimate of the probable loss to the agency, and not calculated simply to impose a penalty on the contractor.

**minority individual:**

an individual who is a citizen of the United States or a non-citizen who is in full compliance with United States immigration law and who satisfies one or more of the following definitions:

- a) "African American" means a person having origins in any of the original peoples of Africa and who is regarded as such by the community of which this person claims to be a part.
- b) "Asian Americans" means a person having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent, or the Pacific Islands, including but not limited to Japan, China, Vietnam, Samoa, Laos, Cambodia, Taiwan, Northern Marinas, the Philippines, a U. S. territory of the Pacific, India, Pakistan, Bangladesh or Sri Lanka and who is regarded as such by the community of which this person claims to be a part.

c) "Hispanic American" means a person having origins in any of the Spanish speaking peoples of Mexico, South or Central America, or the Caribbean Islands or other Spanish or Portuguese cultures and who is regarded as such by the community of which this person claims to be a part.

d) "Native American" means a person having origins in any of the original peoples of North America and who is regarded as such by the community of which this person claims to be a part or who is recognized by a tribal organization.

**minority-owned business**

Minority-owned business means a business concern that is at least 51% owned by one or more minority individuals or in the case of a corporation, partnership or limited liability company or other entity, at least 51% of the equity ownership interest in the corporation, partnership, or limited liability company or other entity is owned by one or more minority individuals and both the management and daily business operations are controlled by one or more minority individuals.

**nonprofessional services**

Any services not specifically identified as professional services in the definition of professional services.

**notice of intent to award**

The Notice of Intent to Award is a written notice, or bid tabulation sheet publicly displayed, prior to award, that shows the selection of a vendor for the award of a specific contract or purchase order. This decision may be changed prior to the actual award of a contract or purchase order.

**potential bidder or offeror**

A person who, at the time an agency awards or proposes to award a contract, is engaged in the sale or lease of goods, or the sale of services, insurance or construction of the type to be procured under

such contract, and who at such time is eligible and qualified in all respects to perform that contract, and who would have been eligible and qualified to submit a bid or proposal had the contract been procured through competitive sealed bidding or competitive negotiation.

**professional services**

Shall mean work performed by an independent contractor within the scope of the practice of accounting, actuarial services, architecture, land surveying, landscape architecture, dentistry, law, medicine, optometry, pharmacy, or professional engineering.

**prequalification**

A procedure to prequalify products or vendors and limit consideration of bids or proposals to only those products or vendors which have been prequalified.

**public body**

Any legislative, executive or judicial body, agency, office, department, authority, post, commission, committee, institution, board or political subdivision created by law to exercise some sovereign power or to perform some governmental duty, and empowered by law to undertake the activities described in this chapter.

**request for proposals**

All documents, whether attached or incorporated by reference, utilized for soliciting proposals; the RFP procedure requires negotiation with offerors as distinguished from competitive bidding when using an Invitation for Bids.

**responsible bidder or offeror**

A person or firm who has the capability, in all respects, to perform fully the contract requirements and the moral and business integrity and reliability which will assure good faith performance, and who has been prequalified, if required.

**responsive bidder:** A person or firm who has submitted a bid which conforms in all material respects to the Invitation for Bids.

**services**

Any activities performed by an independent contractor wherein the service rendered does not consist primarily of acquisition of equipment or materials, or the rental of equipment, materials and supplies.

**shall, must**

As used in specifications or requirements of a Request for Proposals (RFP), the terms "must" and "shall" identify requirements whose absence will have a major negative impact on the suitability of the proposed solution. Items labeled as "should" or "may" are highly desirable, although their absence will not have a large impact and would be useful, but are not necessary.

**small business**

An independently owned or operated business by one or more persons who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, which, together with affiliates, has 250 or fewer employees, or average annual gross receipts of \$10 million or less averaged over the previous three years.

**sole source**

A product or service which is practicably available only from one source.

**specification**

A description of the technical requirements for a material, product, or service that includes the criteria for determining whether these requirements are met. A specification may describe the performance parameters which a supplier has to meet, or it may provide a complete design disclosure of the work or job to be done. Specifications for service contracts normally take the form of a statement of work.

**SWAM**

The acronym SWAM, includes small businesses, women-owned businesses and minority-owned businesses.

**termination for convenience**

The termination by the owner, at its discretion, of the performance of work in whole or in part and makes settlement of the contractor's claims in accordance with appropriate policy and procedures.

**termination for default**

Action taken by a purchasing office to order a contractor to cease work under the contract, in whole or in part, because of the contractor's failure to perform in accordance with the contract's terms and conditions.

**Virginia Public Procurement Act (VPPA)**

Chapter 43 of Title 2.2, *Code of Virginia*, which enunciates the public policies pertaining to governmental procurement from non-governmental sources.

**women-owned business**

A business concern that is at least 51% owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, or in the case of a corporation, partnership or limited liability company or other entity, at least 51% of the equity ownership interest is owned by one or more women who are citizens of the United States or non-citizens who are in full compliance with United States immigration law, and both the management and daily business operations are controlled by one or more women who are citizens of the United States or non-citizens who are in full compliance with the United States immigration law.



## 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 – RIVANNA PUMP  
STATION RECONSTRUCTION PROGRAM CONTROLS  
IMPROVEMENTS – SHORT ELLIOT HENDRICKSON INC.**

**DATE: JULY 23, 2024**

This request is to authorize the Executive Director to execute a work authorization with Short Elliot Hendrickson Inc. (SEH) totaling \$347,661 to provide design, construction administration and field services to complete the Rivanna Pump Station Controls Improvements as part of the reconstruction efforts.

### Background

The Rivanna Wastewater Pumping Station (RVWWPS) is a 53-mgd rated firm capacity wastewater pumping station at the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF). The pumping station was constructed in 2017. On January 9, 2024, the area served by the MCAWRRF experienced heavy rain, with a local rain gauge recording in excess of 3-inches of rain. Over the course of the day, the RVWWPS received increasing flows coupled with various mechanical and instrumentation failures that caused the pump station to experience numerous alarms culminating in an inundated wet well, dry wells, and stairwells. Upon discovery of the flooded RVWWPS, RWSA staff began implementing bypass pump set up using contractor emergency pumping equipment to handle incoming sewer flows.

The RWSA proposes to utilize two design consulting engineers for the reconstruction project. Short Elliot Hendrickson (SEH) is tasked with design of the controls systems, including local control panels, Programmable Logic Controllers (PLC), Supervisory Control and Data Acquisition (SCADA), and programming services. Hazen and Sawyer (Hazen) is tasked with other design engineering disciplines, including mechanical, structural, HVAC, plumbing, electrical, instrumentation, and others as required. MEB Contracting is proposed to construct the project via a separate term services contract.

RWSA entered into a term agreement with Short Elliot Hendrickson on March 12, 2024, for Professional Wastewater Engineering Services. Under this Contract, SEH would provide Professional Engineering Services for the Rivanna Pump Station Controls Improvements effort to include preliminary engineering, design, construction administration, programming, field services,

commissioning and part-time field inspection services.

Engineering staff has negotiated an initial scope of work based on the above to include:

- Workshop attendance and notes
- Preliminary design report
- Drawings as required, including modifications to the existing Pump Local Control Panel and PLC drawings
- Specifications as required
- PCL and SCADA programs to control the Rivanna Pump Station
- Construction administration services
- Limited construction observation assistance
- Startup and commissioning documents
- Controls Punch List
- O&M manual documentation
- Record Drawings

**Board Action Requested:**

Authorize the Executive Director to execute a work authorization with Short Elliot Hendrickson Inc. for professional services to complete the Rivanna Pump Station Reconstruction Program Controls Improvements totaling \$347,661 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 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: BETTERMENT AGREEMENT WITH CITY OF  
CHARLOTTESVILLE UTILITIES DEPARTMENT– EMMET  
STREETSCAPE WATER LINE BETTERMENT**

**DATE: JULY 23, 2024**

This request is to authorize the Executive Director to execute a Betterment Agreement with the City of Charlottesville Utilities Department to construct approximately 3,300 linear feet of 24-30” water main in Emmet Street as part of the City’s Emmet Streetscape Project. This agreement stipulates the terms for reimbursing the City of Charlottesville Utilities Department for all costs associated with design and construction of RWSA water main for an estimated not-to-exceed cost of \$5,138,479, including design, bid-phase, construction administration, inspection services, and contingencies.

### Background

The Urban Finished Water Master Plan identified several necessary upgrades to the urban water distribution system to improve system performance and reliability. One of the identified improvements is an upgrade and extension of the existing RWSA water main along the Emmet Street corridor from the UVA Dell Pond to Hydraulic Road. RWSA plans to utilize road, streetscape, utility and development projects along the Emmet Street corridor to complete portions of the Emmet Street water main improvements as betterment, with the goal of completing the approximately 2-mile-long water main by 2030. One such project is the City of Charlottesville’s Emmet Streetscape Improvements project, which extends along Emmet Street from approximately University Avenue to Arlington Boulevard and will include installation of approximately 3,300 LF of 24-30” ductile iron pipe for RWSA. Construction is expected to begin in 2025.

The City and RWSA have developed a Betterment Agreement establishing fair and reasonable terms for RWSA to reimburse the City for all costs associated with incorporating the RWSA water main into the Emmet Streetscape Improvements project. The City has provided their design consultant’s estimated costs for the additional design, bid-phase, and construction administration services necessary to include the water main in the City’s project, and RWSA’s design consultant has provided unit price estimates of material and labor costs for construction based on the 70% design drawings that have been developed to date. Total costs for which RWSA will be responsible for reimbursing the City are estimated at \$5,138,479. Actual reimbursement will be made based on the construction bid amount, rather than estimated costs. Funding is in the CIP budget for the

Emmet Street Betterment project approved by the Board of Directors in May 2024.

**Board Action Requested:**

Authorize the Executive Director to execute the Betterment Agreement with the City of Charlottesville with an estimated not-to-exceed cost of \$5,138,479 for design and construction of approximately 3,300 LF of the Emmet Street 24-30” Water Main, and any change orders up to 10% of the original agreement amount.



## 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 TO AMEND PROFESSIONAL ENGINEERING  
SERVICES WORK AUTHORIZATIONS – OBSERVATORY &  
SOUTH RIVANNA WATER TREATMENT PLANTS,  
REHABILITATION AND EXPANSION PROJECT – SHORT  
ELLIOT HENDRICKSON INC.**

**DATE: JULY 23, 2024**

This request is to authorize the Executive Director to execute amendments to Work Authorizations with Short Elliot Hendrickson Inc. (SEH) to provide additional construction phase services for the Observatory Water Treatment Plant of \$204,131 and for the South Rivanna Water Treatment Plant of \$176,270 as needed to continue these services for the extended construction schedule of these rehabilitation and expansion projects.

### Background

The Observatory Water Treatment Plant (OBWTP) is the oldest of the three urban water plants. The plant was originally constructed in the mid-1950's and since that time very little had been replaced or upgraded at the facility. As a result, much of the original equipment was inefficient, prone to unexpected failure, and did not have readily accessible replacement parts. Based on a Needs Assessment Study, the plant needed a wholesale upgrade to many of its treatment components and processes. In addition to these general improvements, the plant's overall capacity will be increased from 7.7 million gallons per day (MGD) to 10 MGD and the plant's granular activated carbon (GAC) treatment capacity will be increased from 2 MGD to 6 MGD.

The South Rivanna Water Treatment Plant (SRWTP) is a conventional water treatment plant that was constructed in 1964 and expanded in 1984 and supplies the majority of the water to the RWSA's Urban Water System. A Needs Assessment Study was performed for this plant as well, which identified the need for general improvements including but not limited to; expansion of existing chemical storage facilities, of two additional filters, a new administration building for Water Department staff, pumping improvements throughout the plant, electrical and mechanical service improvements, and general renovations.

These plants have been under construction since May 2020 and the schedule has been extended for a number of unforeseen conditions, including the COVID 19 pandemic and all of the associated equipment and material delays that followed. That issue was also compounded by the need to shut down the OBWTP for a period of time to allow for extensive improvements that could only be performed during low water demand periods and when classes at UVA were not in session. As a result, there was a one-year delay in performing that work and the schedule impacts related to associated activities were significant. In addition to the delays these impacts have caused directly, they have also created issues with the contractor's efficiency and coordination efforts, resulting in construction delays that in RWSA's opinion, could have been avoided. These issues will be resolved as the project reaches final completion this fall, but in the meantime, additional assistance from SEH is required to complete the construction phase services.

In July 2023, Work Authorization No. 4 with SEH was authorized for additional construction phase services associated with improvements at the SRWTP in the amount of \$180,041. This was in addition to those services that were anticipated in the original Work Authorization for Preliminary Design, Final Design, Bidding and Construction Administration Services authorized in October 2018. Due to the issues listed above, an amendment in the amount of \$176,270 to Work Authorization No. 4 is required to bring the project to completion this fall. The total resulting additional cost for construction phase services would be \$356,311.

In July 2023, Work Authorization No. 5 with SEH was authorized for additional construction phase services associated with improvements at the OBWTP in the amount of \$218,458. This was in addition to those services that were anticipated in the original Work Authorization for Preliminary Design, Final Design, Bidding and Construction Administration Services authorized in October 2018. Due to the issues listed above, an amendment in the amount of \$204,131 to Work Authorization No. 5 is required to bring the project to completion this fall. The total resulting additional cost for construction phase services would be \$422,589.

**Board Action Requested:**

Authorize the Executive Director to execute Amendment No. 1 to Work Authorization No. 4 totaling \$176,270 with Short Elliot Hendrickson Inc. for additional construction phase services to complete the South Rivanna Water Treatment Plant, Rehabilitation and Expansion Project, and any further amendments needed to complete the project not to exceed 25% of the revised total contract amount of \$356,311, provided the resulting total cost is within the approved CIP project budget.

Authorize the Executive Director to execute Amendment No. 1 to Work Authorization No. 5 totaling \$204,131 with Short Elliot Hendrickson Inc. for additional construction phase services to complete the Observatory Water Treatment Plant, Rehabilitation and Expansion Project, and any further amendments needed to complete the project not to exceed 25% of the revised total contract amount of \$422,589, 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 ADDITIONAL ENGINEERING SERVICES –  
MOORES CREEK PUMP STATION SLIDE GATES, VALVES,  
BYPASS, AND SEPTAGE RECEIVING UPGRADES – DESIGN,  
BIDDING AND CONSTRUCTION ADMINISTRATION – HAZEN  
AND SAWYER ENGINEERS**

**DATE: JULY 23, 2024**

This request is to authorize the Executive Director to execute a work authorization for additional services associated with the design, bidding, and construction administration services for the Moores Creek Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades project for an amount not to exceed \$130,182.

### **Background**

The Moores Creek Pump Station is located at the entrance to the MCAWWRF and the north septage receiving station discharges at this location. The pump station was originally constructed with the 1977 plant improvements and its firm capacity was significantly upgraded in 2012 from 15 MGD to 32 MGD.

This project includes the repair or replacement of the existing slide gates that are leaking and the construction of additional gates so staff can have the flexibility to stop or divert flow to perform maintenance activities. In addition, this project will include the repair of three control valves within the pump station, and provide permanent bypass connections so the entire pump station can be bypassed more efficiently in the future when needed. To reduce odors and address maintenance concerns at the existing north septage receiving station, the project will enclose the leachate discharge pit, modify the station to accommodate a wider variety of haulers, provide for better containment of discharged materials, and install rock traps and grinders with all associated process piping to prevent downstream damage and blockages at the Moores Creek Pump Station.

The original project Work Authorization was negotiated with Hazen and Sawyer for design, bidding and construction phase services and that authorization was approved by the Board of Directors at the June 2023 Board meeting. Through preliminary design, it has been recognized that the septage receiving equipment and billing software is antiquated and labor intensive for staff. The original work authorization did not include scope to upgrade this equipment and billing

software. The new work authorization will include the vetting and evaluation of multiple software vendors and equipment types, vendor demonstrations for staff, and incorporation of selected upgrades into the bidding documents and construction along with associated electrical and SCADA upgrades for both the north side and south side septage receiving stations. The additional work also includes a limited study to confirm flood resiliency needs for the MCPS improvements, and additional topographical survey needed for the project.

The original Board authorization for the design, bidding, and construction administration services totaled \$239,975 with a 25% contingency for any potential future amendments needed to complete the work. The additional work identified above totals \$130,182, which exceeds the original 25% design contingency authorized by the Board.

**Board Action Requested:**

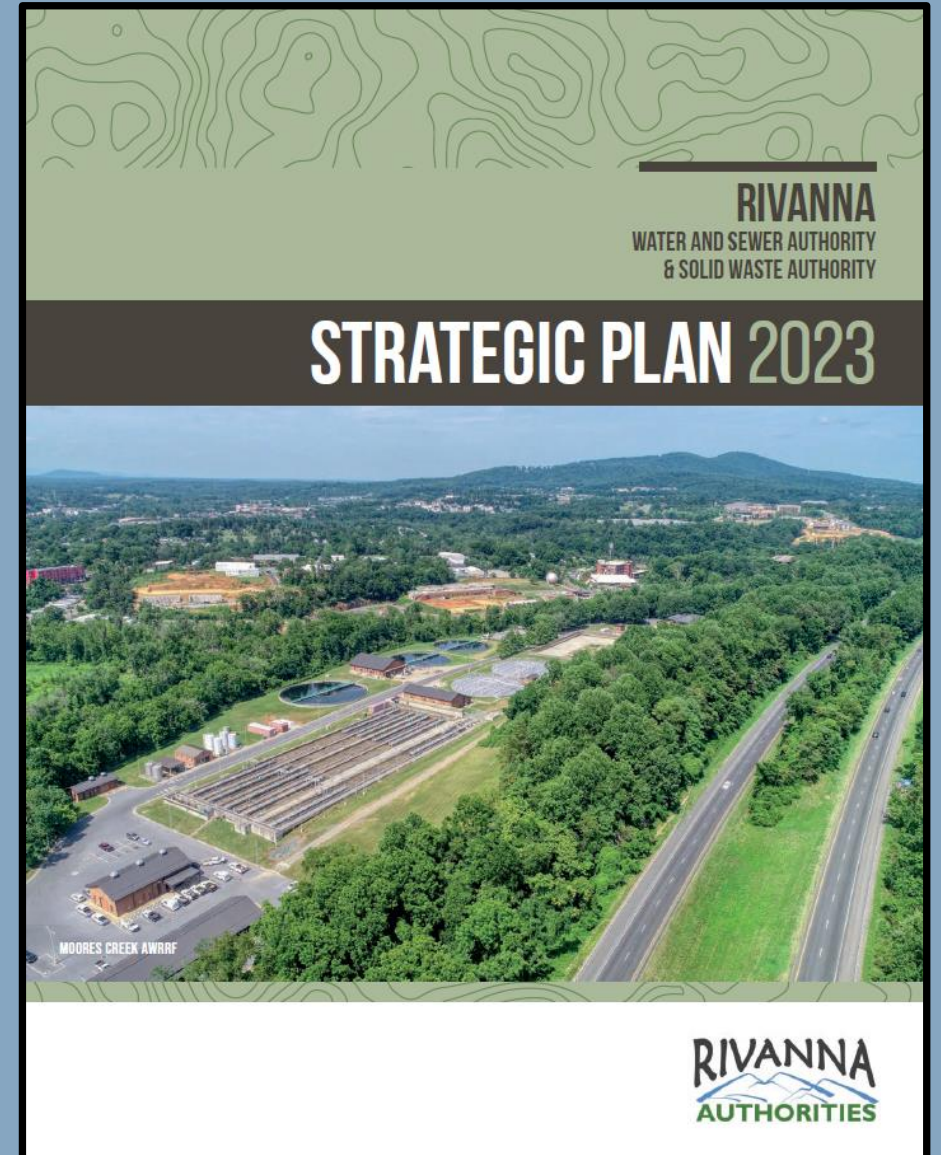
Authorize the Executive Director to execute a Work Authorization totaling \$130,182 with Hazen and Sawyer, for additional professional services to complete the Moores Creek Pump Station Slide Gates, Valves, Bypass, and Septage Receiving Upgrades project, and any further amendments needed to complete the tasks identified above, not to exceed 25% of the revised total contract amount of \$370,157, provided the resulting total cost is within the approved CIP project budget.

# *Rivanna Authorities Strategic Plan Update*

Presented to the RSWA and RWSA Boards of  
Directors

By Betsy Nemeth, Director of Administration &  
Communications

July 23, 2024



# Strategic Framework

## **Vision**

To serve the community as a recognized leader in environmental stewardship by providing exceptional water and solid waste services.

## **Mission**

Our knowledgeable and professional team serves the Charlottesville, Albemarle, and UVA community by providing high-quality water and wastewater treatment, refuse, and recycling services in a financially responsible and sustainable manner.

# Strategic Framework

## Values

- **Integrity** – We are open and transparent, lead by example, and are committed to ethical behavior.
- **Teamwork** – We work collaboratively to help each other succeed and serve the community.
- **Respect** – We treat our fellow employees, customers, business partners, and stakeholders with dignity and respect by embracing their diverse backgrounds and experiences.
- **Quality** – We deliver exceptional services and products, serve our community responsibly, and safeguard natural resources.

# Communication & Collaboration



Woodbrook Elementary School 1<sup>st</sup> graders touring the Ivy ICC and Transfer Station



RSWA sponsorship of WRNR, a non-profit and listener supported independent radio network



**Website Redesign**  
Rivanna.org is becoming rivannawater.org. and rivannasolidwaste.org and Redorange Studios is our webpage designer



RWSA at Riverfest



Follow us on Facebook and Instagram

UVA Public Health class touring the Moores Creek wastewater treatment plant



# Environmental Stewardship



No Mow section of the Ivy MUC helps pollinators thrive



The large clean fill program at the Ivy MUC prevents over 780 metric tons of CO<sub>2</sub> from being discharged into the environment by reducing the distance the trucks travel to dispose of the clean fill.



St. Annes Belfield 10<sup>th</sup> grade class clearing the Moores Creek wetlands



Volunteering with the Rivanna Conservation Alliance to teach kids about the environment

# Workforce Development



We recently had two RWSA Mechanics attend Class A CDL classes at PVCC and a RWSA Operator/Driver is currently enrolled.



U.S. Military Pipeline

Using Paychex hiring to expand our diverse candidate sourcing

Tuition reimbursement program




Ongoing updates to existing job descriptions and the creation of job descriptions for new positions



Individual leadership coaching for new and current leaders in the organization by Barrenridge

Rivanna Authorities  
Job Description - Deputy Executive Director



Deputy Executive Director	
<b>Reports to:</b>	Executive Director
<b>Division/Department:</b>	Executive Leadership / Administration
<b>Pay Grade:</b>	270
<b>FLSA Status:</b>	Exempt
<b>Status:</b>	Essential

**JOB DESCRIPTION**  
The Deputy Executive Director of the Rivanna Water & Sewer Authority (RWSA) and the Rivanna Solid Waste Authority (RSWA), otherwise known as the Rivanna Authorities, is responsible for providing strategic leadership and counsel to the Boards of Directors of both Authorities, the Executive Director, Division Directors, and staff on issues pertaining to the Rivanna Authorities. The Deputy Executive Director is primarily responsible for the successful delivery of water supply and drinking water and wastewater operations required under the 1972 Service Agreement (a.k.a. the "Four Party Agreement"), which outlines the RWSA's responsibility for the delivery of all drinking water and wastewater operations and services. This includes managing, supervising, scheduling, planning, organizing, and directing with respect to operational programs and budgets, water and wastewater treatment facilities, distribution and collection systems, pump stations, customer service and ancillary administrative and financial activities in accordance with the Authorities standards, policies, practices and in compliance with all federal and state regulations and applicable laws. The Deputy Executive Director may also support the Rivanna Solid Waste Authority's operations in accordance with the 1991 Solid Waste Organizational Agreement which outlines the Authority's responsibility for the delivery of refuse and recycling operations.



# Optimization & Resiliency



Optimizing the caustic feed into the Wastewater Aeration Basins.  
Savings: \$173,000



Keeping our employees safe with a new Electrical Safety chapter in the Safety Manual and ARC Flash training for 38 employees



Standardization of the equipment used in our plants to simplify employee training and equipment replacement

Alum feed system specifically designed to determine and feed the correct amount necessary for treatment conditions at the SRWTP resulting in operating and cost efficiencies.



# Planning & Infrastructure

Moores Creek Engineering and Administration Building Potential Value Engineering Items November 2023					
Item #	Item	Potential VE Item	Advantage to Modifying Item / System	Disadvantages to Modifying Item / System	Potential Cost Impacts
<b>Architectural</b>					
A-1	Demolition of existing building and construct all new facility	Yes	Create more efficient floor plan layout, preserve green space on the site, less staff disruption during construction	Cost and extended project schedule	\$265,000
A-2	Reduce number of interior doors	Yes	Cost savings	Reduced privacy and security and more potential issues with acoustics	(\$50,000)
A-3	Glass office walls at interior corridors	Yes	Increase daylighting and views into building interior	Concerns with privacy, security and acoustics	\$202,000
A-4	Modular interior office walls	No			
A-5	Reduce size of connecting link between existing and addition	Yes	Reduced initial cost	Less usable collaboration space	(\$83,000)
A-6	Make addition 2-stories with larger floor plate	No			
A-7	Hydraulic Elevator in lieu of machine room- less unit	Yes	Lower cost and simplified long term maintenance	Required machine room with cooling/ventilation and less energy efficient	(\$25,000)
A-8	Make structural grid more efficient	Yes	Lower cost	Column placement may interfere with open spaces	(\$23,000)
A-9	Move Boardroom to first floor to eliminate fire sprinklers	No			
A-10	Stack plumbing and IT Rooms	Yes	Simplified plumbing and cabling runs and lower cost	Re-design of floor plan layout required	(\$31,000)
A-11	Decrease quantity of curtainwall windows	Yes	Lower initial cost	Less daylighting and reduced interior views	(\$29,000)

Use of Value Engineering to enhance cost efficient project planning



Our Maintenance team using Cityworks to document preventive maintenance on our equipment and to maintain equipment records



Electronic standard operating procedure (SOP) document storage in DocLink has increased by 4.7% so far in 2024, making this information more easily accessible to our teams and enabling them to make quicker decisions

# What's Next?

**Changing the  
RSWA turnover  
goal to  
15%**

*Why?*

*To set realistic, transparent, and achievable goals for our team while driving excellence.*

- FY 2024 employee turnover at RSWA was 22.6%. Six employees left RSWA from July 1, 2023 through June 30, 2024.
- The Strategic Plan goal for RSWA employee turnover is 10%.
- The FY 2025 full-time employee compliment for RSWA is 28. If 3 people leave in FY 2025, RSWA turnover will be 10.7% which is over goal.



Providing high-quality water, wastewater, refuse and recycling services to the Charlottesville, Albemarle, and UVA community.

[www.rivanna.org](http://www.rivanna.org)

**Questions?**



# HUMAN RESOURCES UPDATE

Presented to the RSWA & RWSA Boards of Directors by:

**Leah Beard**, HR Manager

# EMPLOYEE BENEFITS –

## Educating employees about total rewards improves retention & engagement.

**Ease of Open Enrollment** – Completed Open Enrollment online through Paychex for the first time.

**Employee Expenses** - Our Healthcare costs increased by 30%; however, Rivanna absorbed the costs so our employees were not affected.

**Benefit Counseling** - HR hosted 13 in-person sessions to educate and assist our employees in better understanding their benefits. Continuously hosted one-on-one sessions to walk through online platform, and ensure employees have best benefit election based on personalized needs.

**Onboarding New Employees** – Individual review with all new employees to set up benefits through Paychex.

**Evaluated Dental & Vision** - Change to Principal Insurance after receiving employee concerns with prior carrier's network.

**Preparing for Retirement** – Hosted a *Retirement Supplemental Healthcare Option* session for employees nearing retirement.

Host one-on-one Early Retirement reviews with employees. Regularly hosts VRS specialists to offer appointments for in-person one-on-one sessions.



## EMPLOYEE BENEFITS



# RETAINING & RECRUITING TALENT -

Advertising vacancies internally & externally to promote diverse candidate pools.

## EMPLOYEES:

- Solid Waste: 28
- Water & Sewer: 104

## TALENT:

- 15 Internal Promotions
- 14 New Hires
- 4 Interns

## EEOC:

- Executive Leadership: Female: 33% Male: 67%
- Employees: Female: 29% Male: 71%
- People of Color: 18%



## CAREER OPPORTUNITIES

posted online through Paychex and being promoted on a variety of diverse websites:

- Indeed
- LinkedIn
- SimplyHired
- Trovit
- Glassdoor
- US Military Pipeline
- ZipRecruiter
- American Water Works Association

## On-Site Interviews

Hosting interviews on-site at the locations where the candidate could potentially work. This allows for hiring managers to provide tours and candidates to understand the day-to-day expectations of the role.

# WORKFORCE DEVELOPMENT -

Contributing to the success of our community by investing in our employees.

## Succession Planning

- Deputy Executive Director
- Finance Manager
- Sustainability & Grants Coordinator
- Recycling Assistant Manager
- Outreach Coordinator
- Five-Year Staffing Plans

## Turnover Rates

- Water & Sewer: 14%
- Solid Waste: 22%
- We have revised our Solid Waste Department Turnover Rate from 10% to 15%; so we have achievable and transparent expectations moving forward.





# WORKFORCE DEVELOPMENT CONTINUED



## Employee Growth & Development

- 5 Operator License Exams passed
- 10 Skills Bonuses paid to Maintenance Employees for taking external coursework
- Correspondence Coursework for Water & Wastewater Operators
- LinkedIn Learning available for free for all employees
- Safety Training easily accessible on Paychex mobile app
- Cyber Security Training available on KnowBe4
- PLC specific training coursework for IT

## Leadership Training

Training provided to 30 individual employees; topics include:

- Emotional Intelligence
- Interpersonal Skills
- Communication
- Feedback & Delegation
- Teams and Teamwork
- Conflict Management
- Diversity, Equity, & Inclusion



# EMPLOYEE ENGAGEMENT & COMMUNITY PARTNERSHIPS –

Contributing to the success of our community by investing time and resources in local partners.

- Hosted 15 separate events engaging with our local Community Partners.
- Each employee receives *Volunteer Time Off* to encourage community involvement.
- We are hoping to partner with CATEC in the Fall to create opportunities for job shadowing and mentorship.
- Promoting a *Culture of Safety* by offering Safety Training on the mobile Paychex app.



# QUESTIONS?



**THANK YOU!**



## MEMORANDUM

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

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

**REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR**

**SUBJECT: APPROVAL OF AMENDED AND RESTATED BY-LAWS**

**DATE: JULY 23, 2024**

This recommendation is to amend the By-Laws of both Authorities to increase the threshold that the Executive Director can authorize the award of procurements from \$200,000 to \$300,000 to reflect changes in the “Purchasing Policies and Procedures” of the Authorities. By aligning the Executive Director’s authorization with purchasing procedures, award and completion of small projects can be expedited.

The “Purchasing Policies and Procedures” of the Authorities are being updated and recommended for approval by the Board at the July 23, 2024, Board of Directors meeting to reflect changes in the Virginia Public Procurement Act (VPPA). There was a change in the VPPA effective on July 1, 2024, that increased the purchasing thresholds requiring formal competitive bids or competitive negotiations from \$200,000 to \$300,000 for non-transportation **construction-related projects**. The procurement threshold for goods and non-professional services remains at \$200,000.

As noted in the memo for the policy update, the purchasing threshold requiring formal competitive bids or competitive negotiations was increased from \$200,000 to \$300,000 for non-transportation **construction-related projects** in the VPPA. Goods and non-professional services threshold remains at \$200,000. The VPPA update requires a formal procurement process above these stated thresholds. An attached resolution and a redlined version of the By-Laws is included.

### **Board Action Requested**

Approve the Resolution to Adopt the Amended and Restated By-Laws dated July 23, 2024.



**RESOLUTION OF THE  
BOARD OF DIRECTORS OF THE  
RIVANNA WATER AND SEWER AUTHORITY  
ADOPTING  
AMENDED AND RESTATED BY-LAWS**

**JULY 23, 2024**

**WHEREAS**, the Board of Directors (the “Board”) of the Rivanna Water and Sewer Authority (the “Authority”) has determined that it is in the best interests of the Authority to amend and restate the current By-Laws of the Authority, which were adopted and made effective as of November 15, 2022 (the “Current By-Laws”); and

**WHEREAS**, pursuant to Article VI of the Current By-Laws, the Board may amend, add to, alter, or repeal the Current By-Laws at any meeting of the Board, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting; and

**WHEREAS**, the Board deems it advisable and in the best interest of the Authority to amend and restate the Current By-Laws to authorize the Executive Director to sign contracts and other instruments to be executed on behalf of the Authority for purchasing or procurement contracts when the aggregate amount of the contract is \$300,000 or; and

**WHEREAS**, the Board has considered the proposed Amended and Restated By-Laws in the form attached hereto as Exhibit A (the “Amended and Restated By-Laws”) and has determined that it is advisable and in the best interests of the Authority to amend and restate the Current By-Laws by adoption of the Amended and Restated By-Laws and to ratify, confirm and approve all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority;

**NOW, THEREFORE, BE IT RESOLVED**, that the Current By-Laws are hereby amended and restated in their entirety, and the Amended and Restated By-Laws attached hereto as Exhibit A are hereby adopted and ratified in all respects, effective immediately; and be it

**FURTHER RESOLVED**, that the Secretary of the Authority or any other proper officer of the Authority be, and each of them hereby is, authorized and directed to place the Amended and Restated By-Laws and this resolution in the minute books of the Authority; and be it

**FURTHER RESOLVED**, that all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority prior to the date of these resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority; and be it

**FURTHER RESOLVED**, that the proper officers of the Authority are, and each of them hereby is, authorized and directed to prepare, execute and deliver, or cause to be prepared, executed and delivered, any and all agreements, documents, certificates and instruments, and to take any and all such other actions as may be deemed necessary, desirable or appropriate, to carry out the purpose and intent of each of the foregoing resolutions; and be it

**FURTHER RESOLVED**, that any actions taken by such officers or directors prior to the date of these resolutions that are within the authority conferred by the foregoing resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority.

Approved by the Board of Directors  
at a meeting at which all members of the  
Board of Directors were present

July 23, 2024

---

Samuel Sanders, Secretary

**AMENDED AND RESTATED  
BY-LAWS OF THE  
RIVANNA WATER AND SEWER AUTHORITY**

(Effective ~~November 15, 2022~~ July  
23, 2024)

ARTICLE I

OFFICES

1. The principal office of the Rivanna Water and Sewer Authority (the “Authority”) shall be in Charlottesville or Albemarle County, Virginia, at 695 Moores Creek Lane, Charlottesville, Virginia 22902 or at such particular place as shall be fixed from time to time by resolution of the Board of Directors (the “Board”).

2. Except as otherwise required by resolution of the Board, or as business of the Authority may require, all of the books and records of the Authority shall be kept at the office as designated above.

ARTICLE II

DIRECTORS

1. The Authority shall have a Board of Directors. All corporate powers shall be exercised by or under the authority of, and the business and affairs of the Authority managed under the direction of, its Board of Directors, pursuant to the provisions of the Articles of Incorporation of the Authority, as amended from time to time (the “Articles”) and Sections 15.2-5113 and 5114 of the Code of Virginia (the “Code”). Directors shall be appointed or elected in the manner and for the term set forth in the Articles of Incorporation.

ARTICLE III

OFFICERS

1. The officers of the Authority shall be a Chair, a Vice-Chair, and a Secretary-

Treasurer. An election will be held at the regular April Board meeting in even-numbered years



with the duly elected officers assuming office as of May 1 for a term of two years and such officers may succeed themselves indefinitely.

2. The Chair shall be the presiding officer of the Authority. Unless some other person is specifically authorized by procedures or instructions adopted by vote of the Board, and except as otherwise provided in Article III, Section 5 below, the Chair shall sign all contracts and other instruments to be executed on behalf of the Authority. The Chair shall perform all the duties and have such other powers as the Board may from time to time designate. The Chair shall be a member of the Board.

3. The Vice-Chair shall perform all the duties of the Chair in the event of the Chair's absence or incapacitation or in the event of the Chair's office falling vacant and also perform such tasks as the Chair or the Board may assign from time to time. The Vice-Chair shall be a member of the Board.

4. The Secretary-Treasurer or his or her designee shall attend all meetings of the Board and act as secretary or clerk thereof; such person shall record all votes and keep accurate records of all proceedings at such meetings in a minute book to be kept for that purpose, which shall be open at all reasonable times to the inspection of any member or any other person authorized by law. The Secretary-Treasurer or his or her designee shall keep in safe custody the official seal of the Authority and shall have authority to affix such seal to all papers authorized to be executed by the Authority requiring such seal to be affixed. The Secretary-Treasurer shall have authority to cause copies to be made of all minutes and other records and documents of the Authority and to give certificates under the official seal of the Authority to the effect that such copies are true copies, and all persons dealing with the Authority may rely upon such certificates.

The Secretary-Treasurer or his or her designee shall perform all the duties commonly incident to the office of secretary or clerk and shall perform such other duties and have such powers as the Board may from time to time designate. In the absence of the Secretary-Treasurer and/or his or her designee from any meeting of the Board, a temporary secretary may be chosen who shall record the proceedings thereof.

Subject to the provisions of any trust agreement securing revenue bonds, bond anticipation notes, or other financial obligation of the Authority, the Secretary-Treasurer or his or her designee shall have the care and custody of the funds of the Authority and shall have and exercise, under the supervision of the Board, all the powers and duties commonly incident to the office of ~~treasurer~~Treasurer. The Secretary-Treasurer shall be selected by the Board and may or may not be a member of the Board.

5. There shall be an Executive Director who shall be the chief administrative officer of the Authority and shall be selected from a list of qualified individuals by vote of the Board. The Executive Director, acting on request of the Chair, shall cause notice to be given of all meetings of the Authority as required by law or by these By-Laws. The Executive Director is authorized to sign contracts and other instruments to be executed on behalf of the Authority; provided, for purchasing or procurement contracts: (i) the aggregate amount of the contract is ~~\$200,000~~\$300,000 or less; (ii) the term of the contract is one year or less; and (iii) funds required for payment terms of the contract have been authorized by the Board through adoption or amendment of the annual operating budget.

6. In addition to the officers, duties and powers above mentioned, the Board may provide for and delegate to such deputies, assistants and other officers as it may deem necessary from time to time, who shall perform such duties and have powers as the Board may designate.

## ARTICLE IV

### MEETINGS OF THE AUTHORITY

1. Meetings of the Board may be called by the Chair, or in the event of the Chair's absence from the Commonwealth or incapacity, by the Vice-Chair, for such time and at such place in the Commonwealth as may be specified in the call.

2. Meetings shall be governed by Robert's Rules of Order (the "Rules") to the extent that they do not conflict with these Amended and Restated By-Laws (these "Bylaws") or the Articles. Should there be a conflict between the Rules and the Articles and/or these Bylaws, the Articles will control, followed by these Bylaws, followed by the Rules.

3. Regular meetings of the Board will be held at the Authority's Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia, at 2:15 p.m. on the fourth Tuesday of each month, or at such other place as the Board may designate from time to time. Public notice of such meetings will be required only if the time and/or place of such meetings is changed for any reason.

4. Notwithstanding anything herein to the contrary, meetings of the Board may also be held virtually and/or a Board member may participate in a Board meeting through remote participation, in each case in accordance with Sections 2.2-3708.2 and 2.2-3708.3 of the Code and the Remote Participation Policy of the Rivanna Water and Sewer Authority adopted by the Board on November 15, 2022, as may be adopted from time to time by the Board in accordance with the Code (the "Remote Participation Policy"), in each case at the frequency and pursuant to the terms and limitations set forth therein.

5. Meetings in addition to the regular meeting may be called by the Chair, or the Vice-Chair when acting for the Chair under the conditions stated above, for such time and at such place in the Commonwealth as may be specified in the call, provided written notice of such meeting is

delivered to the Board members, left at their residence or usual place of business, or delivered by electronic mail not less than forty-eight hours prior to the date and time specified for such meeting. In addition, the Executive Director shall take such measures as may be necessary to make sure that news media and the public have at least twenty-four hours notice of any such special meeting.

6. In the event that the officer issuing the call for a special meeting declares an emergency to exist, the notice required shall be three hours, provided that the declaration of emergency is approved by vote of the Board members at that special meeting.

7. The notification of Board meetings at which subject matter is discussed and/or acted upon by the Authority in compliance with the requirements of Section 15.2-5100, et seq. of the Code (the Virginia Water and Waste Authorities Act) will be as specified in that statute.

8. All Board meetings shall be open to the public, except when, pursuant to the provision of Section 2.2-3711 of the Code, the Board members have voted to hold a closed meeting, and no resolution, rule, contract, regulation, or motion discussed in such closed meeting, in each case as authorized by an exemption set forth in Section 2.2-3711 of the Code, shall become effective unless the Board reconvenes in open meeting and takes a vote on such resolution, rule, contract, regulation, or motion that shall have its substance reasonably identified in the open meeting.

9. At meetings of the Board the following order of the business shall be observed, in general, as far as is consistent with the purpose of the meeting:

- a. Correction and approval of the minutes of the preceding meeting.
- b. Consideration of items from the public, except matters on the agenda for which a public hearing has been called, and responses from Board or staff to public comments.
- c. Vote on approval of consent agenda, to include regular staff reports on

expenditures, operations, and capital projects.

d. Other business, including unfinished business.

10. The vote on the adoption of every resolution shall be by ayes and nays. The names of the Board members voting for or against the resolution shall be entered upon minutes of the meetings, unless the vote be unanimous, in which case the minutes will so state.

11. A majority of the members of the Board shall constitute a quorum but the vote of the majority of the total members shall be necessary for any action taken by the Board.

12. A Board member may designate an alternate to attend meetings the member is unable to attend. Such alternates may take part in any deliberations of the Board but may not vote on any matter and may be excluded from any closed meeting.

#### ARTICLE V

#### OFFICIAL SEAL

The official seal of the Authority shall consist of the embossed impression of a circular metallic disc containing in the outer rim the words "Rivanna Water and Sewer Authority." The Secretary-Treasurer or his or her designee shall secure such seal and cause the impression thereof to be made on the minutes of the meetings of the Board.

#### ARTICLE VI

#### AMENDMENTS

Except as otherwise provided by law, these By-Laws may be amended, added to, altered, or repealed in whole or in part by the Board at any meeting, including at any meeting of the Board held virtually pursuant to the requirements of Article IV, Section 4 herein, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting. Any member participating in the meeting through remote participation pursuant to the requirements of Article IV, Section 4 herein

is deemed to be present at such meeting.

ARTICLE VII

FISCAL YEAR

The fiscal year of the Authority shall be determined in the discretion of the Board, but in the absence of any such determination it shall be the year beginning July 1 and ending June 30.

Certified to be the Amended and Restated By-Laws of the Rivanna Water and Sewer Authority, duly adopted by the Board at a meeting at which all members of the Board were present on ~~November 15, 2022~~July 23, 2024.

\_\_\_\_\_  
Name: \_\_\_\_\_

Office: \_\_\_\_\_

101354819.4



# Amended and Restated By-Laws

---

**Presented to the Boards of Directors**

**By: Lonnie Wood, Director of Finance and Information Technology**

**July 23, 2024**

# The By-Laws are proposed to be Amended and Restated to:

---

- Increase the threshold that the Executive Director can authorize the award of procurements from \$200,000 to \$300,000 to align with changes in the “Purchasing Policies and Procedures” of the Rivanna Authorities.

*By aligning the Executive Director’s authorization with our purchasing procedures, award and completion of small projects can be expedited.*



# Action Requested by Each Board

---



Approve the Resolution to adopt the Amended and Restated By-Laws, effective on July 23, 2024



**RESOLUTION OF THE  
BOARD OF DIRECTORS OF THE  
RIVANNA SOLID WASTE AUTHORITY  
ADOPTING  
AMENDED AND RESTATED BY-LAWS**

**JULY 23, 2024**

WHEREAS, the Board of Directors (the "Board") of the Rivanna Solid Waste Authority (the "Authority") has determined that it is in the best interests of the Authority to amend and restate the current By-Laws of the Authority, which were adopted and made effective as of November 15, 2022 (the "Current By-Laws"); and

WHEREAS, pursuant to Article VI of the Current By-Laws, the Board may amend, add to, alter, or repeal the Current By-Laws at any meeting of the Board, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting; and

WHEREAS, the Board deems it advisable and in the best interest of the Authority to amend and restate the Current By-Laws to authorize the Executive Director to sign contracts and other instruments to be executed on behalf of the Authority for purchasing or procurement contracts when the aggregate amount of the contract is \$300,000 or; and

WHEREAS, the Board has considered the proposed Amended and Restated By-Laws in the form attached hereto as Exhibit A (the "Amended and Restated By-Laws") and has determined that it is advisable and in the best interests of the Authority to amend and restate the Current By-Laws by adoption of the Amended and Restated By-Laws and to ratify, confirm and approve all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority;

NOW, THEREFORE, BE IT RESOLVED, that the Current By-Laws are hereby amended and restated in their entirety, and the Amended and Restated By-Laws attached hereto as Exhibit A are hereby adopted and ratified in all respects, effective immediately; and be it

FURTHER RESOLVED, that the Secretary of the Authority or any other proper officer of the Authority be, and each of them hereby is, authorized and directed to place the Amended and Restated By-Laws and this resolution in the minute books of the Authority; and be it

FURTHER RESOLVED, that all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority prior to the date of these resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority; and be it

FURTHER RESOLVED, that the proper officers of the Authority are, and each of them hereby is, authorized and directed to prepare, execute and deliver, or cause to be prepared, executed and delivered, any and all agreements, documents, certificates and instruments, and to take any and all such other actions as may be deemed necessary, desirable or appropriate, to carry out the purpose and intent of each of the foregoing resolutions; and be it

FURTHER RESOLVED, that any actions taken by such officers or directors prior to the date of these resolutions that are within the authority conferred by the foregoing resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority.

Approved by the Board of Directors  
at a meeting at which all members of the  
Board of Directors were present

July 23, 2024



**RESOLUTION OF THE  
BOARD OF DIRECTORS OF THE  
RIVANNA WATER AND SEWER AUTHORITY  
ADOPTING  
AMENDED AND RESTATED BY-LAWS**

**JULY 23, 2024**

WHEREAS, the Board of Directors (the "Board") of the Rivanna Water and Sewer Authority (the "Authority") has determined that it is in the best interests of the Authority to amend and restate the current By-Laws of the Authority, which were adopted and made effective as of November 15, 2022 (the "Current By-Laws"); and

WHEREAS, pursuant to Article VI of the Current By-Laws, the Board may amend, add to, alter, or repeal the Current By-Laws at any meeting of the Board, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting; and

WHEREAS, the Board deems it advisable and in the best interest of the Authority to amend and restate the Current By-Laws to authorize the Executive Director to sign contracts and other instruments to be executed on behalf of the Authority for purchasing or procurement contracts when the aggregate amount of the contract is \$300,000 or; and

WHEREAS, the Board has considered the proposed Amended and Restated By-Laws in the form attached hereto as Exhibit A (the "Amended and Restated By-Laws") and has determined that it is advisable and in the best interests of the Authority to amend and restate the Current By-Laws by adoption of the Amended and Restated By-Laws and to ratify, confirm and approve all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority;

**NOW, THEREFORE, BE IT RESOLVED**, that the Current By-Laws are hereby amended and restated in their entirety, and the Amended and Restated By-Laws attached hereto as Exhibit A are hereby adopted and ratified in all respects, effective immediately; and be it

**FURTHER RESOLVED**, that the Secretary of the Authority or any other proper officer of the Authority be, and each of them hereby is, authorized and directed to place the Amended and Restated By-Laws and this resolution in the minute books of the Authority; and be it

**FURTHER RESOLVED**, that all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority prior to the date of these resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority; and be it

**FURTHER RESOLVED**, that the proper officers of the Authority are, and each of them hereby is, authorized and directed to prepare, execute and deliver, or cause to be prepared, executed and delivered, any and all agreements, documents, certificates and instruments, and to take any and all such other actions as may be deemed necessary, desirable or appropriate, to carry out the purpose and intent of each of the foregoing resolutions; and be it

**FURTHER RESOLVED**, that any actions taken by such officers or directors prior to the date of these resolutions that are within the authority conferred by the foregoing resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority.

Approved by the Board of Directors  
at a meeting at which all members of the  
Board of Directors were present

July 23, 2024