




Board of Directors Meeting


April 26, 2022


2:15pm



695 Moores Creek Lane | Charlottesville, Virginia 22902-9016

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www.rivanna.org 

BOARD OF DIRECTORS

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

DATE: April 26, 2022
LOCATION: Virtually via ZOOM
TIME: 2:15 p.m.

AGENDA

- 1. CALL TO ORDER**
- 2. STATEMENT FROM THE CHAIR**
- 3. MINUTES OF PREVIOUS BOARD MEETING**
 - a. Minutes of Regular Board Meeting on March 22, 2022
- 4. ELECTION OF CHAIR, VICE CHAIR & SECRETARY-TREASURER**

Mr. Gaffney is currently the Chair, Mr. Richardson is the Vice Chair, and the Secretary-Treasurer position has been vacant since the departure of Mr. Boyles in October 2021.

A motion, second and vote would be in order to elect new Officers for a two-year term starting on May 1, 2022.

- 5. RECOGNITION**
- 6. EXECUTIVE DIRECTOR'S REPORT**
- 7. ITEMS FROM THE PUBLIC**

For matters not listed on the agenda for public hearing
- 8. RESPONSES TO PUBLIC COMMENTS**
- 9. CONSENT AGENDA**
 - a. Staff Report on Finance
 - b. Staff Report on Operations
 - c. Staff Report on Ongoing Projects
 - d. Staff Report on Wholesale Metering
 - e. Staff Drought Monitoring Report

- f. Approval of the “Northern Area Drinking Water Projects Agreement”*
- g. Transfer of Ownership to Albemarle County Service Authority – Upper Morey Creek Interceptor*
- h. Concurrent Resolution of the City Council of the City of Charlottesville, Virginia and the Board of Supervisors of the County of Albemarle, Virginia to Extend the Existence of the Rivanna Water and Sewer Authority*
- i. Award of Term Contract for Easement Acquisition and Real Estate Services*
- j. Construction Contingency Addition – Moores Creek AWRRF Lighting Improvements Project*
- k. Capital Improvement Plan Budget Amendment –South Rivanna Water Treatment Plant, Rehabilitation and Expansion Project*

10. OTHER BUSINESS

- a. Presentation and Approval: Buck Mtn Property Update, Lease and Sale Procedures
Bill Mawyer, Executive Director*
- b. Presentation: Review of RWSA Organizational Agreements
Bill Mawyer, Executive Director*

11. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA

12. CLOSED MEETING

13. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT VIRTUAL RIVANNA BOARD OF DIRECTORS MEETINGS

If you wish to address the Rivanna Board of Directors during the time allocated for public comment, please use the “chat” feature in the Zoom Meeting interface.

Members of the public who submit comments 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.” The comment(s) will be read aloud to the Board of Directors only during this agenda item, so comments must be received prior to the end of this agenda item. The comments will be read by the Rivanna Authority’s Executive Coordinator/Clerk of the Board.

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.

If you would like to submit a comment, please keep in mind that Board of Directors meetings are formal proceedings and all comments are recorded on tape. In order to give all who wish to submit a comment proper respect and courtesy, the Board requests that commenter follow the following guidelines:

- Submit your comment prior to the start of or during the “Items From The Public, Matters Not Listed for Public Hearing on the Agenda” section of the Agenda.
- In your comment, state your full name and address and your organizational affiliation if commenting 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;
- Be respectful and civil in all interactions at Board meetings;
- 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 commenters 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 Administration office upon request or can be viewed on the Rivanna website.

CALL TO ORDER

STATEMENT OF CHAIR TO OPEN MEETING

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

I would like to call the April 26, 2022 meeting of the Board of Directors to order.

Notwithstanding any provision in our Bylaws to the contrary, as permitted under the City of Charlottesville's Continuity of Government Ordinance adopted on March 7, 2022 (Ordinance No. O-22-029), Albemarle County's Continuity of Government Ordinance adopted on April 15th, 2020, and last revised effective November 4, 2020 (Ordinance No. 20-A(16)) and Chapter 1283 of the 2020 Acts of the Virginia Assembly effective April 24, 2020, we are holding this meeting by real time electronic means with no board member physically present at a single, central location.

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

ROLL CALL:

Ms. Hildebrand: Please state your full name and location.

Ms. Mallek: Please state your full name and location.

Mr. O'Connell: Please state your full name and location.

Mr. Pinkston: Please state your full name and location.

Mr. Richardson: Please state your full name and location.

Mr. Rogers: Please state your full name and location.

And I am Mike Gaffney, located at _____.

Joining us today electronically are the follow Authority staff members and consultants:

Bill Mawyer, Lonnie Wood, David Tungate, Jennifer Whitaker, John Hull, Jeff Southworth, Andrea Bowles, Deborah Anama, and Attorney Valerie Long (Williams Mullen).

We are also joined electronically by Carrie Stanton (Williams Mullen), counsel to the Authority.



RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
March 22, 2022

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, March 22, 2022 at 3:06 p.m. via Zoom.

Board Members Present: Mike Gaffney, Jeff Richardson, Brian Pinkston, Michael Rogers, Ann Mallek, Lauren Hildebrand, Gary O'Connell.

Board Members Absent: None.

Rivanna Staff Present: Bill Mawyer, Lonnie Wood, John Hull, Jennifer Whitaker, Jeff Southworth, Andrea Bowles, Deborah Anama.

Attorney(s) Present: Carrie Stanton and Valerie Long.

1. CALL TO ORDER

Mr. Gaffney called the March 22, 2022, regular meeting of the Rivanna Water and Sewer Authority to order at 3:06 p.m.

2. STATEMENT FROM THE CHAIR

Mr. Gaffney read the following statement aloud:

“This is Mike Gaffney, Chair of the Rivanna Water and Sewer Authority. I would like to call the March 22, 2022 meeting of the Board of Directors to order.

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

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

Mr. Gaffney called the roll.

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

48
49 Ms. Ann Mallek stated she was at 4829 Advance Mills Road in Earlysville, Albemarle County.

50
51 Mr. Gary O'Connell stated he was located at 1720 Yorktown Drive in Charlottesville, VA.

52
53 Mr. Brian Pinkston stated he was located at his office at 1450 Leake Drive, University of Virginia in
54 Charlottesville, VA.

55
56 Mr. Jeff Richardson stated he was located at the County Office Building at 401 McIntire Road in
57 Charlottesville, VA.

58
59 Mr. Michael Rogers stated he was located at Charlottesville City Hall.

60
61 Mr. Mike Gaffney stated he was located at 3180 Dundee Road in Earlysville, VA.

62
63 Mr. Gaffney stated the following Authority staff members and consultants were joining the meeting
64 electronically: Bill Mawyer, Lonnie Wood, David Tungate, Jennifer Whitaker, John Hull, Jeff
65 Southworth, Deborah Anama, and Attorney Valerie Long (Williams Mullen).

66
67 Mr. Gaffney stated they were also joined electronically by Carrie Stanton, (Williams Mullen)
68 counsel to the Authority.

69
70 **3. MINUTES OF PREVIOUS BOARD MEETING**

71 *a. Minutes of Regular Board Meeting on February 22, 2022*

72
73 Ms. Mallek noted line 403 of the February 22 minutes regarded Buck Mountain Creek and the
74 history of the Buck Mountain Reservoir. She asked someone to explain the reference to a street
75 survey.

76
77 Mr. Mawyer stated the line was supposed to reference a stream survey not a street survey.

78
79 Mr. Gaffney asked if there were further comments or changes to the minutes.

80
81 **Mr. O'Connell moved that the Board approve the minutes of the February 22, 2022**
82 **meeting with the amendment of line 403 from "street" to "stream." Ms. Mallek seconded**
83 **the motion. The motion passed unanimously (7-0).**

84
85 **4. RECOGNITIONS**

86 There were no recognitions.

87
88 **5. EXECUTIVE DIRECTOR'S REPORT**

89
90 Mr. Mawyer recognized Ms. Mary Morris who passed the Class 1 Water Operator's exam. He
91 stated Ms. Morris started working with the Authority one year ago with no operator's license,
92 and now she had the highest level of license. He stated a Class 1 Water Operator's license was

required on site at the South Fork Rivanna Water Treatment Plant (WTP) and Observatory WTP 24/7.

He stated Ms. Liz Coleman, Safety Manager, received a Certified Safety Professional certification. He stated through her education and experience, Ms. Coleman obtained the certification. He congratulated Ms. Katie McIlwee, Asset Management Coordinator, who completed her Master of Informatics degree. He stated the Authority assisted these individuals through education reimbursement programs.

Mr. Mawyer stated in accordance with the Virginia Water and Wastewater Authorities Act, authorities are authorized for 50 years, then they have to be re-authorized. He stated the RWSA was authorized in June 1972, and the authority was celebrating its 50-year anniversary. He stated resolutions would be submitted to the Board of Supervisors and the City Council to re-authorize the RWSA.

Mr. Richardson asked when those re-authorization resolutions would be submitted.

Mr. Mawyer responded that the resolutions would be submitted in May or in early June because the authorization expired in June.

He stated easements for the South Rivanna Reservoir to the Ragged Mountain Reservoir pipe project were being negotiated. He stated discussions were ongoing with the UVA Foundation regarding an easement on property owned by the Foundation. He stated the project would construct a waterline from the north end of the Birdwood golf course to the Westover Farm, located north of Old Garth Road.

Mr. Mawyer noted that sampling of Beaver Creek Reservoir indicated high algae levels. He stated the reservoir required a treatment to lower the algae levels which would affect the odor and taste of the drinking water. He stated it was the earliest algae bloom in recent memory. He stated a hypolimnetic oxygenation system was planned to be installed. He explained the system was a pipe system laid at the bottom of the reservoir that would bubble oxygen through the water to minimize the conditions conducive to algae blooms. He stated construction of the system was included in the Beaver Creek Dam improvement project slated for 2024 to 2026. He stated the algaecide treatments were required when the algae became excessive.

Mr. Mawyer stated the exterior lighting project at Moores Creek had garnered some concern. He stated new light fixtures would be placed around the aeration basins. He stated about half of the new lights had been installed, and the light levels emitted from the plant should be reduced. He stated the remaining large lights surrounding the aeration basin would be installed by the end of the week, weather permitting. He stated there were other lights to replace. He stated a strategic lighting program would be evaluated to determine what lights needed to be on and when the lights needed to be on. He stated there were safety reasons for the lights to be on all night, such as staff safety around the wastewater storage basins.

Mr. Mawyer stated there were neighborhood meetings with the Fry's Spring and the Fifeville neighborhoods. He stated a meeting with the Little High Street neighborhood and the

139 Charlottesville Day School was scheduled for March 30. He stated the meetings were to inform
140 the community of the plans for the Central Waterline and to receive comments from the public.

141
142 Mr. O'Connell asked what the next step in the process was after neighborhood meetings.

143
144 Mr. Mawyer stated there would be a presentation to City Council in June. He explained feedback
145 from the community meetings would be collected and assessed, and feedback from City Council
146 and the Board of Supervisors would be assembled. He stated at the June RWSA Board meeting,
147 a recommendation would be presented as to the final location of the waterline. He stated unless
148 there was another suggestion, or more information came up requiring further study, then the item
149 would be back before the Board no later than June.

150
151 Mr. Rogers asked if the City Council would make an action on the report to provide guidance.
152 He asked what action the Council would take.

153
154 Mr. Mawyer stated during the presentation to City Council in June, he would summarize the
155 feedback received from the community about the project. He stated he planned to provide
156 Council a project update on the issues and responses to those issues. He stated feedback from the
157 Council would be requested.

158
159 Mr. Rogers asked if the RWSA would determine whether the project would move forward.

160
161 Mr. Mawyer stated in January 2020, an agreement was signed between the City, the Albemarle
162 County Service Authority, and RWSA. He stated the agreement addressed the funding for the
163 Observatory WTP improvements, along with the other pipeline improvements, to transport raw
164 water from the Ragged Mountain Reservoir to the Observatory WTP. He stated the agreement
165 addressed the commitment to complete the Central Water Line and to capitalize on the value
166 added from the raw water pipe and water treatment plant improvements.

167
168 Mr. Mawyer stated in order to capitalize on the improvements and improve the water distribution
169 system, the Central Water Line had to be completed. He stated once the water master plan was
170 completed, it would serve as the basis for consideration of the final route of the Central Water
171 Line.

172
173 Mr. Rogers asked if the City Council reviewed the report and concluded it was not comfortable
174 with the facts of the report, and the item was brought back before the Board, would the Board
175 vote to move forward with the plan or to modify the plan.

176
177 Mr. Mawyer stated the City Council comments would be brought back before the Board, and the
178 City's position could be further expressed to the Board. He stated he hoped there would be a
179 consensus that the route of the waterline was appropriate, and that most people would be in
180 agreement with the information presented.

181
182 Mr. Mawyer indicated traffic counts, street widths, water modeling (the ways different routes
183 provided varied benefits to the water system), and impacts to the neighborhoods were factors to
184 be considered in the evaluation. He stated all the neighborhoods would be impacted relatively the

185 same with a trench in the street to install the pipe. He stated emergency vehicle routes were
186 examined along 5th Street. He stated it was suggested that the Route 29 / Route 250 bypass was
187 a better route for the waterline, but he noted the far greater impact to traffic than the Cherry
188 Avenue route. He stated all suggestions would be considered and objective data would be
189 gathered to come up with a suggested route.

190
191 Mr. Rogers noted the issue was complex. He asked staff to work on a simplified explanation of
192 the process and project.

193
194 Mr. Mawyer stated the information would be made understandable to a non-technical audience.
195 He stated a one-page project information sheet had been completed, and presentations to the
196 community were made to be understandable. He stated if information was not clear, there could
197 be modifications.

198
199 Mr. Mawyer stated the last item was related to safety and confined spaces. He stated confined
200 spaces were usually manholes, communication manholes, or vaults with equipment. He stated
201 confined spaces had a regulatory meaning. He stated people had to be prepared with harnesses
202 and devices to extract workers from the spaces if they were to become ill. He stated if there was
203 a complicated space, a rescue team had to be available. He stated there was an MOU with the
204 City and County fire departments that if a rescue team was needed proactively, then the
205 departments would support the authority. He stated our Safety Manager, Ms. Liz Coleman was
206 effective in establishing the agreements.

207
208 Ms. Mallek asked if the water quality association provided research as to the causes of the algae
209 blooms. She stated the use of certain chemicals that came from runoff changed the way aquatic
210 plants absorbed phosphates which exacerbated growth. She stated changes in the uses of the
211 chemicals around the reservoir could aid in mitigating the blooms. She asked if the possibility of
212 motion sensors for the Moores Creek lighting had been considered.

213
214 Mr. Mawyer stated studies had been done. He stated they were aware of phosphates from
215 fertilizers and how they created algae blooms because they promoted plant growth. He stated a
216 phosphate study for the South Fork Rivanna Reservoir was underway. He stated the study was on
217 the impact of piping water from the South Fork Rivanna Reservoir to the Ragged Mountain
218 Reservoir versus constructing a treatment plant to remove the phosphates and sediment. He
219 stated the Water Manager worked with watershed protection projects and phosphate
220 management. He stated motion sensors could be a suggestion to work into the strategic lighting
221 operations at Moores Creek. He stated motion sensors could be a good way to turn the lights on
222 and off as needed.

223 224 **6. ITEMS FROM THE PUBLIC**

225 Mr. Gaffney opened the meeting to the public. He asked speakers to identify their name and
226 where they live, and to keep in mind the three-minute time limit.

227
228 Mr. Hull stated there were four people with comments.

230 Mr. Justin Thomas Beights stated he lived at 1 Canterbury Road, Charlottesville, Virginia. He
231 stated he was speaking on behalf of his wife's family, Colleen Kovac Beights and Michael and
232 Kathleen Kovac—the former owners of the parent parcel of the 2.2 acres in the Buck Mountain
233 Reservoir Property. He stated the RWSA indicated it was interested in selling the parcel. He
234 stated he and his father-in-law had been in contact with the Board. He stated he and his wife's
235 family were interested in buying the 2.2-acre land back. He explained the land was sold by his
236 in-laws in 1983 to the RWSA. He stated the property was sold at a fair market value, and the
237 family was interested in buying the property at fair market value.

238
239 Mr. Beights stated adjacent landowners were interested in the future of the property. He stated a
240 group of Free Union residents expressed interest in preserving the house on the land, the former
241 Elliot House. He stated Mr. Bruce Bateman, a friend of the family, had been consulted and had
242 sent correspondence to the Board regarding his opinions on the future use of the land. He stated
243 Mr. Bateman was responsible for two of his children.

244
245 Mr. Beights stated a negotiated sale to a former landowner was the best way for the RWSA to
246 ensure the architectural integrity of the final protect and the water quality of the adjacent
247 property and the County. He stated the vision for the property was a small-footprint, barn-style
248 architecture similar to the existing house. He stated he could provide more detail regarding the
249 design. He stated the family was ready and willing to pay fair market value. He stated a sealed-
250 bid process could lead to an architectural eye-sore.

251
252 Mr. Gaffney told Mr. Beights he was over his time limit.

253
254 Mr. Matthew Lucas stated he lived at 1966 Buck Mountain Road, two doors down from the
255 Elliot House. He stated he had discussed at a prior meeting about adjusting his property line
256 between his house and TMP 29-36A, a 66-acre lot owned by the RWSA for the reservoir. He
257 explained at the last meeting, it was indicated that after the boundary adjustment, the plan was to
258 lease the balance of the lot, TMP 29-36A, and combine it with three other lots and offer it as one
259 aggregate parcel for lease. He requested that the parcels be leased individually.

260
261 Mr. Lucas stated he was interested only in leasing TMP 29-36A because it was originally part of
262 his farm, and he wanted to lease the parcel for his farm. He stated some of the parcels up for
263 lease were behind his neighbor's property. He stated those neighbors might be interested in the
264 other lots of the bundle because they were closely connected to their property. He stated TMP
265 29-36A was closely connected to his property.

266
267 Mr. Lucas stated he would take care of land and clean up debris. He stated he had a long-term
268 view for the property. He stated his neighbor was interested in the two lots behind his own house
269 that were part of the aggregate bundle. He stated if the bundle were broken up, the same result
270 would be achieved as bundling. He stated if the Board looked for a Buck Mountain community
271 liaison, he was willing to fill the role.

272
273 Ms. Dede Smith stated she lived at 2652 Jefferson Park Circle, Charlottesville, Virginia. She
274 stated she was concerned about the Central Waterline project because it would cut through the
275 City on the route to Pantops in the northern urban area. She stated the pipeline was a new

276 construction project, not a reimagining. She stated Mr. Mawyer emailed a City Councilor,
277 stating, “the Central Waterline project was not included in the original community water supply
278 plan, but was added in recent years by RWSA as a necessary project to, among other things,
279 increase the drinking water supply of the community.”

280
281 Ms. Smith stated the goal of the Central Waterline project was different then the southern loop
282 agreement. She stated there was another reference in the materials to the Central Waterline, “it
283 was decided in the August 2018 Board meetings that we should complete the finished water
284 master plan prior to moving forward with final design and construction of the central waterline.”
285 She asked why the Board was moving forward with the project before the urban water master
286 plan was released.

287
288 Ms. Smith stated she had read the draft master plan. She stated in the master plan, besides the
289 Central Waterline project, a 30-inch pipeline running water from Observatory to Pantops, there
290 was another 30-inch pipeline in the master plan to run water from Observatory north along
291 Emmet Street. She stated the Emmet Street pipeline would connect the two water treatment
292 plants, a different pipeline than the pipeline to connect the two reservoirs.

293
294 Ms. Smith stated there were three new pipelines and associated infrastructure planned within the
295 next decade. She asked how the projects would be funded. She noted that in 2022, less water was
296 used per day than in the 1990s. She asked how the million dollars in pipelines would be funded if
297 there was no demand.

298
299 Mr. Michael Kovac stated he and his wife Kathleen Kovac were the former private owners of the
300 Elliot house. He echoed Mr. Beights’ comments and asked for the consideration of the Board to
301 negotiate the sale of the property to the original owners, including the Kovac-Beights family. He
302 stated the family respected the land and the adjacent property owners.

303
304 Mr. Steven Blaine stated he was speaking on behalf of the Hefner property owners who owned
305 property south of TMP 29-33F, one of the parcels the RWSA considered leasing. He stated his
306 clients supported the sale of the 14-acre parcel to Mr. Matthew Lucas and supported Mr. Lucas
307 leasing the balance of TMP 29-36A. He stated the interests of his clients were in alignment with
308 Mr. Lucas.

309
310 Mr. Blaine stated the Kovac family was interested in preserving the surrounding property. He
311 stated his clients were interested in leasing TMP 29-33F and 33C. He stated his clients were not
312 interested in bidding against Mr. Lucas over the leasing of the balance of the remaining parcels,
313 including TM 29-35D.

314
315 Mr. Blaine stated the clients’ interests were in preserving the land and in security. He stated there
316 had been activity that concerned the landowners, such as nighttime firearm discharges. He stated
317 if the adjoining property owners controlled the parcels, they could better protect and monitor the
318 area. He stated there was a consistency among the other speakers in having a past connection to
319 the parcels and preserving them.

320
321 Ms. Anama read a letter from Dr. Bruce Bateman into the record.

Ms. Anama read a letter from Ms. Nancy Chamberlin and Mr. Allan Mayer into the record.

Mr. Gaffney closed the meeting to the public.

7. RESPONSES TO PUBLIC COMMENT

Mr. Gaffney asked Mr. Mawyer if he had a response to the public comment.

Mr. Mawyer stated there would be a presentation on Buck Mountain. He stated there was a meeting with the Beights family and the Kovac family the week prior regarding their concerns. He stated staff had kept in contact with Mr. Matthew Lucas and Mr. Steven Blaine.

Mr. Mawyer stated criteria were being crafted to determine the appropriate process to lease and sell property. He stated a reasonable plan would be crafted so parties were treated fairly through the leasing and sale process. He stated the RWSA attorneys were being consulted. He suggested a presentation would be made to the Board in May regarding the criteria for feedback on the process. He stated feedback regarding preference for former owners would be appreciated.

Mr. Mawyer stated in response to the letter from Ms. Nancy Chamberlin and Mr. Allan Mayer, the mitigation plans to Buck Mountain were approved in 2012 to mitigate the environmental impacts of the Ragged Mountain Reservoir dam. In response to Ms. Smith's question, the Urban Finish Water Master Plan would be finished in April and there would be a presentation before the Board in May.

Mr. Mawyer stated there was a copy of the 2006 conceptual mitigation plan on our website that described how Buck Mountain stream preservation would be used to mitigate the impacts of the Rivanna Reservoir Dam. He stated there had not been a neighborhood meeting, but there would be one planned for the next month regarding Allan Farm Lane, the bridge, the Elliot house, and the lease rates.

Mr. Gaffney asked if other members would like to respond.

Ms. Mallek stated in regard to the letter from Ms. Nancy Chamberlin and Mr. Alan Mayer, the information regarding the trucks crossing the bridge was given to her by a UPS driver and several other different drivers. She stated the drivers stated the companies would not allow drivers to use a bridge that was marked as unsafe. She stated she would send staff a link to Winchester Precast who constructed several bridges in the area. She suggested traffic counts at the location be done to provide data beyond anecdotal information.

Mr. Rogers stated regarding the request to transfer property ownership to a previous owner, he wanted to know the process for disposition of authority property.

Mr. Mawyer stated they were currently working out the process. He stated the Virginia Water and Wastewater Authorities Act, Virginia Public Procurement Act, and other state codes were reviewed. He stated the RWSA had authority to adopt its own process as long as it was in compliance with Virginia code. He stated if the authority wanted to give priority to existing

owners, it could. He stated details could be discussed, such as a more formal definition of “former owners.”

Mr. Rogers stated he was concerned because the property was acquired with public resources, and the RWSA was a public authority, so it should follow a published public procurement ordinance, law, or policy. He stated he inferred the RWSA did not have a set of procurement rules it followed, and state law had to be consulted to determine the authority.

Mr. Mawyer explained there was a detailed purchasing manual that directed the authority with procedures to buy and sell most items, but it specifically did not apply to real estate which was why the state code had to be consulted. He stated direction was required from the Board to create criteria to give prior property owners priority.

Mr. Gaffney asked if there were further comments.

Ms. Mallek asked if there were different rules if the property was purchased through the eminent domain process. She noted the Elliot house was not purchased through eminent domain. She asked if there was a VDOT process.

Mr. Mawyer stated the obligation to sell property to prior owners was primarily a VDOT process. He explained in the Virginia Water and Wastewater Authority Act, there was authority to condemn property, but it did not state an obligation to resell property to owners that were previously condemned. He stated most of the properties at Buck Mountain were not condemned.

8. CONSENT AGENDA

a. Staff Report on Finance

b. Staff Report on Operations

c. Staff Report on Ongoing Projects

d. Staff Report on Wholesale Metering

e. Staff Drought Monitoring Report.

Mr. Gaffney asked if there items from the consent agenda that Board members would like to pull for comment or questions.

Mr. O’Connell moved that the Board approve the Consent Agenda. Ms. Mallek seconded the motion, which passed unanimously (7-0).

9. OTHER BUSINESS

a. Presentation: Northern Urban Area Utilities Update; Jennifer Whitaker, Director of Engineering and Maintenance

413 Ms. Jennifer Whitaker, Director of Engineering and Maintenance, stated a version of the
414 presentation had been presented at the December Board meeting. She stated after receiving
415 questions concerning the potential rezoning of the North Fork research park, and because several
416 members of the Board had turned changed, this presentation would be an update on the process.

417
418 Ms. Whitaker stated the County had been approached along the Route 29 North corridor about
419 potential projects and future needs for utilities. She listed the UVA research park, also known as
420 the Discovery Park, the National Ground Intelligence Center, and the Airport. She stated those
421 areas made up a part of the County Comprehensive Plan called the Places29 master plan. She
422 stated growth was envisioned in the areas. She stated the envisioning was done prior to the 2008
423 Great Recession. She stated the County had been approached by the research park regarding
424 future development and rezoning in the area.

425
426 Ms. Whitaker stated RWSA, ACSA, and the City had plans and routinely updated those plans to
427 systematically improve the drinking water and sewer infrastructure. She stated improvements
428 were balanced so water and wastewater needs were met. She stated there was a 10-to-15-year
429 plan to serve the northern area of the County. She stated the significant utility demands proposed
430 could necessitate one of two choices: accelerate the utility plan or incorporate project phasing so
431 there was no unmet need in the future.

432
433 Ms. Whitaker highlighted the service area within the urban water system. She stated the area
434 included the City, the County's urban ring, along Route 29, east to Glenmore and west towards
435 Ivy. She highlighted the urban wastewater system. She stated the system included the Crozet
436 sewer system. She stated the Crozet system was connected via four pump stations to the urban
437 area and connected to the Moores Creek AWRRF. She stated two-thirds of the system was
438 directed to the Rivanna pump station, and the other third was directed to the Moores Creek pump
439 station. She stated both stations connected to the Moores Creek wastewater treatment plant.

440
441 Ms. Whitaker stated one of the six goals from the strategic plan was infrastructure and master
442 planning, due to the large capital infrastructure investment and the time spent planning projects.
443 She stated the RWSA was charged to plan, deliver, and maintain dependable infrastructure in a
444 financially responsible way. She stated projects were spaced out to meet community needs while
445 not being a financial burden.

446
447 Ms. Whitaker noted that from September 2016 to April 2022, there were a series of master
448 planning documents compiled. She noted the documents included sanitary sewer modeling
449 reports, demand forecasts, safe yield reports, wastewater cost analysis, master plans for the
450 Moores Creek facility, and the Urban Finish Water master plan. She stated there was flow
451 metering in the water and wastewater systems which are monitored on a month over month basis.

452
453 Ms. Whitaker stated the slide displayed (1.) how demands would grow and (2.) how the raw
454 water safe yield could meet the demands. She stated there was a crossing of the lines in 2060
455 based on the previous set of demand data from ACSA, the County, the City, UVAF, UVA,
456 VDOT, and the Weldon Cooper Center. She stated community developments and the state of the
457 reservoirs were considered. She stated an increase of 86,000 gallons per year was projected with
458 a steady incremental increase over time.

459
460 Ms. Whitaker stated the safe yield report examined demand growth versus what was available in
461 the reservoirs. She stated good planning from an infrastructure standpoint meant not building at
462 the last minute, because the exact future conditions could not be predicted. She stated the best
463 available information was used. She stated the goal was to proceed with construction of new
464 infrastructure when the demand reached 80% to 85% of capacity. She stated it was geared to the
465 raw water supply and community water supply plan. She stated by 2035, the South Fork to
466 Ragged Mountain pipeline system should be built to provide an adequate supply of raw water.

467
468 Ms. Whitaker stated the existing drinking water infrastructure in the northern Albemarle area
469 was important to understand. She stated the North Fork Rivanna WTP currently served the area.
470 She stated the plant was augmented with an above-ground diesel pump connected with above-
471 ground hoses. She stated the pump was the backup system to the North Fork WTP.

472
473 Ms. Whitaker stated the North Fork WTP could produce one million gallons per day. She stated
474 the demand was about 500,000 gallons per day. She stated that more recent analysis as to what
475 water was available in the river was completed. She stated during a drought, there was an
476 available supply of about 750,000 gallons per day. She stated as the area grew, there had to be
477 another way to supply water because the North Fork Rivanna River could not supply the entire
478 demand.

479
480 Ms. Whitaker stated there was a North Fork WTP alternative analysis that identified upgrades to
481 the plant would cost \$13 million to \$15 million. She stated the approved plan was to
482 decommission the North Fork WTP and tie the Northern system into the South Fork WTP and
483 the remainder of the urban system. She stated in order to meet the future capacity, the North Fork
484 WTP would be decommissioned, and pipelines and tanks would be constructed to meet the need.
485 She stated now that the need had increased at the North Fork research park and other northern
486 Albemarle areas, the speed of the plan implementation was being reevaluated.

487
488 Ms. Whitaker stated there were several projects planned to be built in the urban system to supply
489 the northern area. She noted the Airport Road pump station, the second crossing of the South
490 Fork Rivanna River, and the second crossing at the North Fork Rivanna River for redundancy.
491 She stated the Observatory and the South Fork WTPs were being updated. She stated the Central
492 Water line project was needed. She stated new raw water pipelines were required from Ragged
493 Mountain Reservoir to Observatory WTP and from South Rivanna Reservoir to Ragged
494 Mountain Reservoir.

495
496 When referencing the wastewater system, Ms. Whitaker stated there were ACSA pipelines and
497 pump stations and RWSA pipelines and pump stations. She stated the sewer system would have
498 to be upgraded between 2045 and 2065. She stated as future growth was evaluated, the upgrades
499 could be accelerated. She stated the data came out of the sewer master plan and regarded the
500 upgrade of ACSA pipes and the remainder of the RWSA collection/interceptor system. She
501 stated the pipes were the limiting factor in the sewer system, and the plan showed how and when
502 to upgrade the pipes. She stated if more demand were placed on the pipes than anticipated, they
503 would have to be upgraded sooner.

505 Mr. Gaffney asked if the Rivanna river was between the blue and yellow marked pipes.

506
507 Ms. Whitaker stated that was correct.

508
509 Mr. Mawyer asked if the pipes marked green were existing.

510
511 Ms. Whitaker stated all the pipes were existing. She stated the green pipes were the RWSA
512 interceptor collector sewer system that brought the flow to the Moores Creek facility.

513
514 Mr. Gaffney clarified that the pipes did not need to be updated except for the last section of the
515 Schenks Branch.

516
517 Ms. Whitaker stated there were small projects, but out of the master plan as it related to the
518 northern area, the last parts to be completed were the Powell Creek areas. She stated there was a
519 plan, and the RWSA was considering the past flows and the future needs. She stated the RWSA
520 considered what was needed from a regulatory standpoint, demand standpoint, and community
521 standpoint.

522
523 Ms. Whitaker stated the work was planned so that there was infrastructure to be built within
524 adequate time. She stated the recent growth in the northern area of the County required the
525 authority to reevaluate plans. She stated there were discussions with UVAF regarding its desires
526 with rezoning, what could be done to serve them, and what limitations might exist. She stated a
527 discussion about the best path forward should follow.

528
529 Mr. Pinkston asked if UVAF had indicated a sense of whether the proposed housing at North
530 Fork would be the tipping point for demand.

531
532 Ms. Whitaker stated the desires of the UVAF from a phasing standpoint were discussed. She
533 stated modeling of the phasing was being examined. She stated all the housing would be able to
534 be served, the question was regarding how quickly the housing would be brought online.

535
536 Mr. Pinkston asked if UVAF had indicated where the housing would be located.

537
538 Ms. Whitaker stated according to the public documents and discussions, the University of
539 Virginia had one set of housing projects, and the UVAF research park had a separate but mildly
540 overlapping housing discussion. She stated the plans did not appear to be the same.

541
542 Mr. Pinkston asked if the team working on the issue understood the importance of the decisions
543 on the water system.

544
545 Ms. Whitaker stated they were aware of the importance. She stated the discussions had focused
546 on how the system needed to evolve to serve the residents along the Route 29 North corridor.

547
548 Ms. Mallek stated housing projects used to contribute funds to speed up the delivery of services
549 to the area. She asked if the funds only came from the rate payers and hook up fee.

550

551 Ms. Whitaker stated there were a few proffers she was aware of that had come to RWSA. She
552 stated whether proffers had gone to other utility processes, she did not know.

553
554 Mr. O'Connell stated regarding wastewater, there was a sewer improvement accomplished with a
555 special rate district—a special connection fee as new development came online to serve future
556 development. He stated the project was \$10 million and was completed a decade ago.

557
558 Mr. O'Connell mentioned that there were a number of housing developments, potential rezoning
559 projects, and commercial developments throughout the system and not just in the northern area.
560 He stated all the developments could have a significant effect on the urban system. He stated as
561 the system adjusted to two water treatment plants and Observatory's expansion, they could have
562 a large effect on other regional water facilities. He stated the whole system should be considered.

563
564 *a. Presentation and Public Hearing: Approval of the Buck Mountain Property Management*
565 *Plan; Bill Mawyer, Executive Director*

566
567 Mr. Mawyer stated last month, Andrea Bowles had given a presentation about the Buck
568 Mountain Property Management Plan. He stated they advertised the public hearing today on the
569 plan, which was step one in a very conservative approach of how to follow the Virginia code and
570 sell real estate. He stated last month, Andrea told them of the history of the completion of a
571 master plan based on their Strategic Plan goals. He stated they identified the Elliott house as a
572 property that was a liability to them that they wanted to dispose of since they no longer could
573 rent it. He stated they worked with a surveyor to carve off 2.2 acres of the 1,300 acres at Buck
574 Mountain to be the subdivision of the house to make it available for sale.

575
576 Mr. Mawyer stated they also proposed and recommended that they could carve off almost 14
577 acres at the cross-hatched area to make a boundary line adjustment for Mr. Lucas, who spoke
578 earlier, which was recommended last month and approved by the Board to transfer the cross-
579 hatched area through the boundary adjustment to Mr. Lucas. He stated third was to take the four
580 parcels shown in light brown and put them together into a lease that they would advertise to the
581 public for public leasing. He stated they had heard comments today about separating these
582 parcels and working with the Hefners and Mr. Lucas to reduce these four parcels to two that
583 would be leased to them and two that would be leased to the public. He stated they had a strategy
584 of including the small parcel #29-35D to give road frontage so that a new lessee could have
585 access to these parcels, otherwise they were landlocked.

586
587 Mr. Mawyer stated last month, the Board approved that they move forward with a process to
588 proceed with the legal and financial procurement processes necessary to offer the 2.2-acre parcel
589 with improvements including the Elliot House for sale to the public, offer about 14 acres to the
590 adjacent neighbor for the boundary line adjustment, and offer four parcels as a combined single
591 lease for passive enjoyment activities. He stated the most conservative process they had found in
592 the Virginia code stated they should start with a public hearing before they would execute these
593 transfers. He stated they could then take comments. He stated a number of people had spoken to
594 this topic already today, and his suggestion was that if there were other speakers who had not
595 already spoken, this would be the time to invite them to speak at the public hearing.

597 Mr. Gaffney stated in reading this again, he supposed they should have deferred those public
598 speakers to this time.

599
600 Mr. Gaffney stated he agreed they should open the public hearing to see if there were others that
601 would like to speak and recognize that those who spoke earlier would have their comments
602 added to this public hearing and recognize they forgot this when looking at the minutes. He
603 opened the floor to public comment on the Buck Mountain Property Management Plan. He asked
604 Mr. Hull if there was anyone who wished to speak.

605
606 Mr. Southworth stated he was sitting in for Mr. Hull and that there were no hands raised to
607 speak.

608
609 Mr. Gaffney stated he would guess that those who wanted to speak about this plan thought it was
610 the appropriate time earlier. He stated they would now close the public hearing and go to
611 comments and questions regarding the Buck Mountain Property Management Plan.

612
613 Ms. Mallek asked if this was the appropriate time to talk about the combined lease.

614
615 Mr. Gaffney stated yes.

616
617 Ms. Mallek stated having non-resident people in there "recreating," whatever their chosen
618 passive recreation was, had not been a happy circumstance for people living on all sides of the
619 ravine. She stated the stream protection was the most important thing, and it was difficult for
620 anyone to see from the road, and difficult for the police department to assist with people who
621 were trespassing with weapons. She stated it created concern on the part of neighbors as well, so
622 she would like separate leases to be possible, and if someone was willing to pick up something in
623 addition to what they asked for originally to get all four of them assigned, that was fine. She
624 stated she thought having the access off of Catterton Road to a landlocked area of vital stream
625 was dangerous, so she hoped they would not do that.

626
627 Mr. Gaffney asked Mr. Mawyer if it had been determined if the straight line on #29-26A was not
628 the right line for that property. He asked if it had been recalculated that.

629
630 Mr. Mawyer stated they had not recalculated it, but they had looked at it on a map. He stated
631 their intent was that they were going to retain all property that would be in the normal pool,
632 which was elevation 464, plus ten feet vertical, so they were working with their surveyor to
633 establish that elevation as property they would not consider for sale. He stated that would make
634 that straight line, particularly to the left, be more segmented to retain the property that they
635 would envision for a future reservoir.

636
637 Mr. Gaffney stated he thought the property owner probably would think about a fence back
638 there, so as straight or as regularly curved as they could put on that would make sense.

639
640 Mr. Mawyer stated they would work with their surveyor and try to come up with a practical
641 property line that would work with Mr. Lucas as best they could.

642

643 Mr. Gaffney asked if there were any other comments or questions from the Board. He asked if
644 Mr. Mawyer was asking for approval of the Buck Mountain Property Management Plan at this
645 time.

646
647 Mr. Mawyer stated he would recommend they come back next month with some more detail on
648 this process and a clearer recommendation that the Board could consider on how they offered
649 leases and sales, because they were working on some criteria for the processes they would use to
650 lease or sell property, and inclusion of the comments they heard recently, including today, about
651 the desires of adjacent property owners. He stated they were looking at leases that would start
652 with the existing lessees, because they had a number of properties that were leased which they
653 were renewing, and a second criterion was that they would lease to adjacent property owners, but
654 if there were more than one, they would solicit all of the adjacent property owners and let them
655 have an opportunity, and the third option would be that they go to a public offering for the lease.
656 He stated on the sale side, there was a little less dealing with existing owners and more making it
657 available to the public, and that was where the Board could offer its comments next month on
658 giving the adjacent property owners and prior property owners priority as far as the sale goes.

659
660 Mr. Pinkston asked if he were talking about coming back with a proposal for how selling might
661 work in terms of a process of what he thought was accessible legally in terms of what the
662 Authority could do.

663
664 Mr. Mawyer stated yes. He stated it would be in terms of what was practical and reasonable, and
665 the Board could add its input.

666
667 Mr. Pinkston stated he was sympathetic to the comments that were made earlier by people who
668 had their property taken through eminent domain years ago, and he did not know how to square
669 that with what Mr. Rogers was saying about the Virginia Public Procurement Act and ensuring
670 that they got the best value and those sorts of things. He stated he assumed their team and legal
671 counsel would help with that.

672
673 Mr. Mawyer stated they would as best they could. He stated he knew there would be an issue,
674 because it was easy to go to a prior owner and give them the first right of refusal, but then a fair
675 and reasonable price must be established. He stated they could use market value, do an appraisal
676 to establish market value, but there had been inferences that somehow they should give prior
677 owners a discounted price because of the challenges when they were, in their words, forced to
678 sell 35-40 years ago. He stated that made it much more difficult to come up with an equation to
679 which they could calculate that fairly for everyone.

680
681 Ms. Mallek stated she thought fair market value was the best way to go because it was best
682 grounded in law, and therefore no special privilege was given, because their dollars were just as
683 good as someone else's, and that made it better from everyone's point of view, and it was ancient
684 history and anyone who was part of that decision was a part of it long ago, and she certainly was
685 not, so she thought it was easier for us to deal with the current values and current state of things.

686
687 Mr. Gaffney stated if they looked at highest and best offer, they may look at legal precedent for
688 allowing past owners to match that highest and best offer.

689
690 Mr. Mawyer asked if he was referring to under a bid scenario.
691

692 Mr. Gaffney stated if they put it on the market and they got multiple bids. He stated sometimes
693 people would put bids on houses that went above the asking price. He asked if there was a way to
694 allow a previous owner to match the highest bid on the house.
695

696 Mr. Mawyer stated that sounded like a great suggestion. He stated they could allow the public to
697 participate but give some priority to the prior owner, if that was what the Board would like to do,
698 but it would not be at a discounted rate.
699

700 Ms. Mallek stated she was not proposing a bidding war, and she was assuming the Authority
701 would establish a sale price for this. She stated she thought there were some elements of use of
702 the property that were described at previous meetings that were very important, and discussion
703 on the site as well of some similarity to the footprint size and tree preservation that she hoped
704 would be hammered out by this Board before anything was offered to the market, because it
705 would be sad to lose those hundreds of big trees and not have the stormwater protection they had
706 there now as well as reuse of the property as it fit into the neighborhood.
707

708 Mr. Mawyer stated if it suited the Board, they would come back next month with more
709 information.
710

711 Mr. Gaffney stated that sounded like a great plan. He asked if there were any other questions or
712 comments to that effect. Hearing none, he introduced the next item.
713

714 *b. Presentation and Approval: Introduction of the FY 2022 – 2023 Operating Budget and*
715 *Adoption of the Preliminary Rate Schedule for Public Hearing: Bill Mawyer, Executive*
716 *Director*
717

718 Mr. Mawyer he stated for the Water and Sewer Authority, they based their budget on their five
719 strategic plan goals: operational optimization, communication and collaboration, workforce
720 development, environmental stewardship, and infrastructure master planning. He stated what
721 they proposed and estimated for next year on the Water and Sewer side was a total budget of
722 about \$41.8M, a \$2.9M increase or 7.4%. He stated their debt service was estimated to increase
723 6.9% or \$1.3M, and their expenses of \$22.1M were estimated to increase 7.8% or \$1.6M and
724 they intended to contribute reserves of \$150K. He stated that had been their practice in the last
725 several years to support the transition of the expense of the GAC material for their new GAC
726 system, but this would be the last year they would be making that contribution from the reserves.
727

728 Mr. Mawyer stated the total effect was that City charges would be \$16.5M, which was a 6.9%
729 increase above the current year, ACSA charges would be \$23.6M, a 9.6% increase above this
730 year, and they noted with an asterisk that they set the water and wastewater operating cost
731 proportionally based on the retail flow that the City and Service Authority reported to them, so
732 the retail wastewater flows in the urban area for FY 2021 resulted in a \$116K shift in those
733 expenses, or 0.73% decrease for the City and a 0.6% increase for the Service Authority. He
734 stated in their simple pie chart of their \$41.8M budget, 47% was debt service to pay their bonds

735 and 53% was for their expenses.

736
737 Mr. Mawyer stated the next slide showed a pie chart of their estimated expenses. He stated
738 personnel was the single largest expense for them, and buildings, grounds, instruments, and
739 maintenance, at \$2.6M, or 12%, was their second highest slice of the pie. He stated chemicals
740 were a large cost for them as well as utilities. He stated there was also professional services,
741 wastewater odor control which was for a turnkey operation to put chemicals in the wastewater on
742 its way from Crozet to Moores Creek to reduce odors and corrosion. He stated they shipped their
743 biosolids to the McGill Composting Facility in Waverly, Virginia, which costs \$735K per year,
744 or 3% of the budget.

745
746 Mr. Mawyer stated technology was a growing component of their expenses, with the Supervisory
747 Control and Data Acquisition System, which ran most of their processes. He stated cybersecurity
748 was a major issue that they were on high alert due to the events with Russia and with the
749 warnings they were receiving from government sources. He stated they had to have the staff and
750 systems to deal with that as well as manage all of their assets and document management and
751 other electronic systems. Information technology was a growing component of their budget as
752 he was sure it was with the City and the County.

753
754 Mr. Mawyer stated in their 17-year history, they saw a pretty straight line of a growing budget.
755 He stated \$41.8M was projected for next year. He stated they had about \$390M in facilities and
756 equipment in their assets, ranging from reservoirs, treatment plants, and miles of water and
757 wastewater piping. He stated they had diversified assets which include a stormwater facility with
758 the Lickinghole Creek Basin they managed and owned. He pointed out a photograph of the
759 aeration basins, which was where they had the biggest challenge with the lighting. He stated they
760 were procuring replacement fixtures now.

761
762 Mr. Mawyer stated some of their major achievements this year included getting the urban water
763 master plan finished next month and presented to the Board in May. He stated they had a
764 wastewater master plan for this plant about which they would present information in June. He
765 stated they had completed the transition from their water corrosion inhibitor product. He stated
766 there always had been a product used, but they transitioned over the last two years to a different
767 product. He stated that was done successfully and without customer concerns or complaints
768 about any issues with drinking water, so it was seen as a success.

769
770 Mr. Mawyer stated they replaced the rubber bladder that sat on top of the concrete dam at Sugar
771 Hollow Reservoir. He stated they had almost completed the Crozet wastewater storage tank,
772 where they took wastewater out of the pipe on its way from Crozet to Moore's Creek, and they
773 stored it in this tank so the piping was not overwhelmed and caused sewer overflows when there
774 was a rain event. He stated they produced well over 3 billion gallons of drinking water and
775 processed over 3 billion gallons of wastewater.

776
777 Mr. Mawyer stated for the next fiscal year, they were going to be completing their water
778 treatment plant renovations at South Rivanna and Observatory WTPs. He stated the Airport Road
779 pump station was under construction, and the Birdwood to Old Garth waterline would be
780 constructed over the next year and were working on the design for the Beaver Creek Dam pump

781 station and piping project that was a major project in Crozet. He stated the design of the central
782 waterline was ready to move forward as they finalized the route. He noted that they would begin
783 to think more about climate change considerations and the possible impacts on our projects.

784
785 Mr. Mawyer stated the newspaper was full of articles about drought in the west and the Glen
786 Canyon Reservoir may not be able to produce enough electricity through its hydroelectric facility
787 for millions of people in the west. He stated in their package this month, they included the
788 drought monitor report, which detailed that they ended last year eight inches below normal
789 precipitation in their area, so they were monitoring the rainfall carefully every month to stay
790 attuned to whether they may be close to a drought.

791
792 Mr. Mawyer stated some of the expenses that increased were due to investments and inflation.
793 They were proposing a 4% merit increase for their workforce, which was in combination with
794 the 6% that was approved by the Board in February. He stated they also considered retirement,
795 taxes, life insurance, and health insurance costs that could increase. He stated they were not
796 proposing any additional positions for the first time in his six-year career, because they wanted to
797 focus on their existing staff and recognized that the collective 10% increase over the last six
798 months was significant. They also had bid out chemicals and were seeing an almost \$300k
799 increase.

800
801 Mr. Mawyer stated also through the bidding process, their biosolids transportation and disposal
802 costs had increased almost 27%, and wastewater odor control costs increased 13%. He stated
803 technology costs went up because they needed to reprogram SCADA screens to provide
804 consistency and optimization. He stated they currently had different screens at different
805 locations, so they were trying to standardize for operational efficiency. He stated they were
806 starting a new program to have a contractor service their aeration equipment. He stated that
807 summarized the \$1.6M they proposed in additional expenses for the next year.

808
809 Mr. Mawyer stated there was no change to their organization chart, with no additional staff for
810 the next year in Water and Sewer. He stated their financial forecast was a 6.9% increase to the
811 City next year and 9.6% to the Service Authority. He stated the chart indicated how those
812 charges may increase over the next five years. He stated they had a capital budget of \$25.8M
813 next year, and their five-year CIP was \$205M, for which they planned to borrow over \$120M,
814 which would create new debt. He then showed a chart that showed historical charge increases to
815 the City and the County. He stated the dip in 2020 was during the Covid-19 pandemic when
816 there were zero charge increases. He stated it rebounded the next year, but they could see the
817 City charge increase forecast was about 7% for a few years, and the Service Authority's was
818 between 8% and 10% for a few years. He warned that the reduction in those rates shown after
819 2028 may or may not occur as they identified needs, particularly in the CIP program.

820
821 Mr. Mawyer stated their outstanding debt was currently about \$204M. He stated it would need to
822 grow to finance the projects planned. He showed a slide with the debt curves provided to the
823 Board in 2018. He stated the light green showed the current debt and the dark green showed
824 projected debt increases based on borrowings they would need to pay for their capital programs.
825 He stated in 2018 when they were reviewing the Rivanna to Ragged pipeline project, one of the
826 alternatives was that they went below the debt payment line around 2030, and that was when

827 they would have capacity to add debt for that project.

828
829 Mr. Mawyer stated when they looked at the debt profile their current debt service was proposed
830 to be \$19.7M. He stated that the light green was the current debt and the dark green was what
831 would be added when they borrowed, which was typically every other year to not create more
832 debt service requirement than they needed, but at the same time to have the capital to pay the
833 capital construction bills.

834
835 He stated in summary, there was a budget of \$41.8M, which was a \$2.9M increase, or 7.4%. He
836 stated their debt service was projected to increase and their expenses would increase largely due
837 to inflation issues, and their charges to the City would increase 6.9%, and to the Service
838 Authority, 9.6% next year. He stated they were asking for adoption of the resolution that would
839 allow them to publish the preliminary rate schedule and advertise a public hearing for those
840 wholesale charges to the Service Authority and to the City to be held in May.

841
842 Mr. Gaffney asked if there were any comments or questions from the Board.

843
844 Mr. Pinkston asked to see the chart that showed the rate of increase for the County and the City.
845 He asked why the City's was less.

846
847 Mr. Mawyer asked to see the project list for 2023. He stated the major pipeline from Rivanna to
848 Ragged Mountain reservoirs was funded 80% by the Service Authority. He stated the Beaver
849 Creek Dam project was 100% funded by the Service Authority. He stated that was generally why
850 there was a difference in the charge increases to the Service Authority and the City. There were
851 agreements in place about the allocation of capital projects costs which impacted the charge
852 increases.

853
854 Mr. Pinkston stated that it was important that the County and City were in this together in terms
855 of having a system that served the whole region.

856
857 Mr. Mawyer stated that was the message communicated at neighborhood meetings. He stated
858 Rivanna's mission was to provide for the entire area, not only the City or the County, but for
859 both. He stated there were pipes located 100% within the County that served the City and the
860 County, and the central waterline was 100% in the City and served the City and the County. He
861 stated that was their mission with the reservoirs, water treatment plants, major pipelines, and the
862 wastewater systems, to serve the entire community.

863
864 Mr. Pinkston asked if 6.9% was basically what the wholesale rate increase would be for the City,
865 and he assumed that increase was what was reflected in the final preliminary rate schedule which
866 was much more detailed.

867
868 Mr. Mawyer stated the preliminary rate schedule included their operating expenses of producing
869 and selling water. He stated the debt service was an annual payment made that was collected
870 through the charges. He stated the 6.9% was an overall charge increase to the City and would not
871 be seen on the preliminary rate schedule. He asked if Mr. Wood could discuss this.

873 Mr. Wood stated the debt service payments were basically those different allocation amounts
874 tallied up by different projects and different bond issues. He stated it was a pretty extensive table,
875 but they would tally it up for the annual payment needed and divided it by twelve, so there was
876 one charge that was a monthly amount and one that was an operating charge per thousand
877 gallons based on the consumption.

878
879 Mr. Pinkston asked if the 6.9% increase for the City charge was a total charge.

880
881 Mr. Wood stated yes, it included all services and was based on an estimated flow they may have.
882 He stated the flow would vary almost every year, but it was an estimate based on what they
883 estimated the flow would be.

884
885 Mr. Gaffney clarified that Mr. Mawyer stated that there was pipe that was 100% in the County
886 that benefited both the City and the County, and the central waterline that would be 100% in the
887 City would benefit the City and the County.

888
889 Mr. Mawyer stated that was correct.

890
891 Mr. O'Connell noted that the wholesale rate that was shown there was not what the retail rate
892 would be for the Service Authority and the City, but it would be a significantly lesser amount in
893 the retail rate that would be announced by the ACSA at its April 17 meeting. He stated the
894 Service Authority budget included some reserves they had been planning to use to create a rate
895 stabilization reserve.

896
897 Mr. Richardson asked about earlier in the presentation when they projected water availability all
898 the way out to 2120.

899
900 Mr. Mawyer stated with the pipeline from Rivanna Reservoir to Ragged Mountain Reservoir,
901 they projected they would have adequate water supply for approximately 100 years.

902
903 Mr. Richardson stated he would like him to discuss this further, because he knew Mr. Mawyer
904 had been doing this for a while, and that was not normal for many communities. He stated if they
905 went across other areas in the United States, there were a lot of communities that did not have a
906 100-year water supply looking out, and he caveated that by saying it would be true once they had
907 the pipeline from Rivanna to Ragged Mountain Reservoir finished. He asked if that was correct.

908
909 Mr. Mawyer stated yes, and that they were very fortunate. He stated the State acknowledged in
910 its water supply report that Rivanna was doing a good job storing water with the multiple
911 reservoir system. He stated in order to create extra water, a reservoir must be constructed to hold
912 water for when it was needed, but the reservoir must be filled, and that was what the pipeline
913 from the Rivanna Reservoir to the Ragged Mountain Reservoir did. He stated it allowed them to
914 fill their largest reservoir at Ragged Mountain. They could add up to 700 million gallons to the
915 current water level after they got the pipeline built. He stated if our community was using ten
916 million gallons a day from Ragged Mountain, the additional 700 MG gave them 70 days of
917 additional water supply. He stated when there were drought conditions, like what was
918 experienced in the west, a 70-day supply was significant. He stated that was why it was so

important to get the pipeline project built.

Mr. Mawyer stated the community experienced the drought in 2002, and as a result they collectively decided to build a new dam at Ragged Mountain to make the reservoir larger, but they had not increased their ability to fill that reservoir and make use of it, which was what the pipeline would allow them to do. He stated they must be able to fill and refill the Ragged Mountain Reservoir, which could only be done in a timely manner with this pipeline. He stated essentially all of the rainwater west of Route 29 from Green County to Israel Mountain in Batesville theoretically drained to the South Rivanna Reservoir, which was why they were piping out of that reservoir with the largest watershed to fill Ragged Mountain. He stated Ragged Mountain ironically was the largest reservoir and yet had the smallest watershed. He stated that was acknowledged in the 2012 Community Plan, but they cured the issue of putting the bigger reservoir at Ragged Mountain by installing this pipeline.

Mr. Richardson stated that overlaying Mr. Mawyer's remarks with the debt management program, when looking at the new pipeline in place in that 2032 – 2033 timeline, that was about the time when they would retire some debt and would maintain their debt service, so it appeared that was happening at an ideal time. He stated a final thing he would say was thanks to Mr. O'Connell and the Service Authority for the rate softening by creating reserves so that the ratepayer did not see the rates go up 9.6% in one year.

Ms. Mallek stated there was much work to be proud of from the past forty years. She stated the downzoning that happened in that area west of 29 from the north to the south that drained into the South Fork Reservoir, it was a significant sacrifice on the part of Albemarle County landowners to restrict their development considerably, and it was a great decision and supported with court appeals. She stated it was what allowed this availability of this water resource they were planning for in the future, and she was appreciative of those before them who made that hard decision and followed up with it for these forty years. She stated they had the capability to stay a little more cautious. She stated in 2017, a 70-day supply evaporated overnight in a way, because it took them five or ten days to figure it out. She stated her pastures were concrete right now from lack of rain in the northwest part of the County, and that was part of the prime rain band. She stated they were supposed to be providing water to the reservoir and they were not because there was not enough rain.

Mr. Mawyer stated they would discuss that more when they talked about climate change, because the concern was that they needed to have the most stored water they could as soon as possible, and it was unclear if they could really wait until 2033 to complete expansion of their water storage. He stated that was the concern. He stated they would roll the dice for ten years and hope they did not have the next drought of record in that period.

Mr. Gaffney asked if there were any other comments or questions. Hearing none, he asked if there was a motion.

Ms. Mallek moved to adopt the preliminary rate schedule. Mr. O'Connell seconded the motion, which passed unanimously (7-0).

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

967 There were no additional items from the Board. Mr. Mawyer stated there were no items from
968 staff.

969
970 **11. *CLOSED MEETING***

971 There was no closed meeting.

972
973 **12. *ADJOURNMENT***

974 **At 5:05 p.m., Mr. Pinkston moved the meeting be adjourned. Mr. O'Connell seconded the**
975 **motion, which passed unanimously (7-0).**

976
977



MEMORANDUM

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

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: EXECUTIVE DIRECTOR'S REPORT

DATE: APRIL 26, 2022

STRATEGIC PLAN GOAL: WORKFORCE DEVELOPMENT

Recognitions

The professional qualifications of our staff continue to improve and enhance our services. The following employee has successfully completed the requirements for a license from the State:

Dennis Barbieri - Wastewater Operator, Class 3

Drinking Water Week

The essential work of drinking water professionals to support our community will be celebrated May 1 -7, 2022.

Regional Safety Training

We are hosting five 4-hour training sessions provided by a PVCC Trainer that will certify 68 of our staff to perform confined space entries, fall protection, and lockout/tagout procedures. Five staff members from City Utilities will join us in this training session.

STRATEGIC PLAN GOAL: OPERATIONAL OPTIMIZATION

VDH Grant Application

With assistance from our consultant, we submitted an application totaling \$21.3 M to the Virginia Department of Health, Office of Drinking Water for a construction project to add granular activated carbon (GAC) vessels at four of our water treatment plants. Funded by the federal "Bipartisan Infrastructure Law", this program targets the removal of emerging contaminants from drinking water such as PFAS/PFOA. GAC filters are one of the leading technologies to remove PFAS/PFOA. Our application proposes adding GAC filters at the South Rivanna, Observatory, Crozet and Red Hill WTPs. Scottsville and North Rivanna WTPs were not included in the scope of this project, as Scottsville WTP has adequate GAC capacity and the North Rivanna WTP is scheduled for decommissioning in a few years. We expect to receive a response from the VDH in the fall about projects selected to receive funding.

STRATEGIC PLAN GOAL: INFRASTRUCTURE AND MASTER PLANNING

Central Water Line Project

We are continuing our process to inform the community about this project. This five-mile-long piping project will extend from the Stadium Road area to the Long Street / E. High Street bridge. Informational meetings have been completed with the Belmont-Carlton, Fifeville, Fry's Spring, Johnson Village, Martha Jefferson, Little High Street, and Woolen Mills neighborhood associations. We have also mailed about 480 letters and a "Project Fact Sheet" to all properties located directly along the entire proposed alignment. In addition, we have reached out to the Ridge Street and JPA Neighborhood Associations, Mount Zion Baptist Church, First Steps Infant Development, and Charlottesville Day School, as well as to the Piedmont Housing Alliance, Public Housing Area Residents, and the Charlottesville Redevelopment and Housing Authority. Additional neighborhood presentations will be scheduled if requested.

S. Rivanna to Ragged Mtn Reservoir Water Pipe

Easements and agreements (VDOT) have been obtained from all parties along the route except from 1 private owner near Barracks Road and from the UVA Foundation for 2 properties. Preparation of engineering plans and specifications have been substantially completed to construct a 0.25-mile section of this 36" raw water pipe from Birdwood to Old Garth Road in 2022 - 2023.

Exterior Lighting Project, Moores Creek

Replacement fixtures around the aeration basins have been installed. There are additional fixtures across our 80-acre property which will be replaced in 1-2 months. Further, we have implemented a "Strategic Lighting Program" to turn lights on at night only when and where needed to further reduce light levels.

STRATEGIC PLAN GOAL: COMMUNICATION & COLLABORATION

Outreach

Dave Tungate, Director of Operations gave a presentation to elementary students who are attending Albemarle County's Virtual School.

Wastewater managers conducted three tours of the Moores Creek Advance Water Resources Recovery Facility on March 28th with groups of UVA engineering students.



MEMORANDUM

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

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

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: FEBRUARY MONTHLY FINANCIAL SUMMARY – FY 2022

DATE: APRIL 26, 2022

Urban Water flows and rate revenues are 3% over budget estimates through February, and Urban Wastewater flows and rate revenues are 0.15% under budget. Revenues and expenses are summarized in the table below:

| | Urban Water | Urban Wastewater | Total Other Rate Centers | Total Authority |
|---------------------|----------------|---------------------|-----------------------------|--------------------|
| Operations | | | | |
| Revenues | \$ 5,706,813 | \$ 6,234,621 | \$ 1,565,295 | \$ 13,506,729 |
| Expenses | (5,408,560) | (6,144,677) | (1,665,316) | (13,218,553) |
| Surplus (deficit) | \$ 298,253 | \$ 89,944 | \$ (100,021) | \$ 288,176 |
| Debt Service | | | | |
| Revenues | \$ 5,106,168 | \$ 5,846,289 | \$ 1,339,257 | \$ 12,291,714 |
| Expenses | (5,111,753) | (5,817,354) | (1,340,562) | (12,269,669) |
| Surplus (deficit) | \$ (5,585) | \$ 28,935 | \$ (1,305) | \$ 22,045 |
| Total | | | | |
| Revenues | \$ 10,812,981 | \$ 12,080,910 | \$ 2,904,552 | \$ 25,798,443 |
| Expenses | (10,520,313) | (11,962,031) | (3,005,878) | (25,488,222) |
| Surplus (deficit) | \$ 292,668 | \$ 118,879 | \$ (101,326) | \$ 310,221 |

When reviewing the Authority as a whole, operating revenues are \$720,500 over budget and operating expenses are \$522,400 over budget, for a net budget surplus of \$198,100. (This does not include debt service.)

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 be significant impacts on the budget vs. actual monthly comparisons

but will even out as the year progresses. Septage receiving support revenue of \$109,441 is billed to the County annually in July. Annual payments are made for leases, health savings account contributions, and certain maintenance agreements. Insurance premiums are paid quarterly.

- B. Personnel Costs (Urban Water, Urban Wastewater – pages 2, 5) – The Urban rate center salaries are running high due to pay increases for plant operators resulting from operators achieving higher licenses. Urban Water also had an overlap of salaries for the outgoing water department manager and the interim manager’s salaries in July and August. These Urban Water salary overages are offset by overbudgeted health insurance costs, so total personnel costs are under budget for Urban Water.
- C. Professional Services (Crozet Water, Glenmore Wastewater, Administration – pages 3, 6, 8) – Crozet Water incurred unbudgeted engineering and technical services expenses for a water demand forecast update. Glenmore Wastewater has spent \$95,000 this year to perform a needs evaluation for Glenmore WRRF, which is an unbudgeted cost. This will cause Glenmore Reserves to be overdrawn, causing the other rate centers to fund Glenmore cost overruns. The Administration department has incurred \$518,000 in unbudgeted bond issuance costs which were paid with bond proceeds.
- D. Information Technology (Scottsville Water, Administration – pages 4, 8) – This rate center has incurred \$11,400 unbudgeted SCADA maintenance and support costs to replace modems. The Administration department has spent about \$14,000 more than the annual budget in this category.
- E. Operations & Maintenance (Scottsville Water, Scottsville Wastewater, Maintenance – pages 4, 7, 9) – Scottsville Water has incurred some unbudgeted building and grounds maintenance costs. Crozet Water is over budget for Beaver Creek Watershed signs and utility easement clearing costs. We will be reimbursed by a grant from the State for the watershed sign costs. Scottsville Wastewater incurred \$14,000 of unbudgeted repairs to the lagoon intake gates. The Maintenance department is over budget on the cost of fuel, lubricants, and other maintenance supplies.
- F. Other Services and Charges (Urban Wastewater – page 5) - Urban Wastewater is over budget on odor control chemical costs at Crozet Pump Station and on the cost of sludge hauling for composting.

Extra costs will be incurred this year to mitigate several items identified in a Cyber Security Assessment conducted in August of 2021.

Attachments

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022
Fiscal Year 2022

Consolidated**Revenues and Expenses Summary****Operating Budget vs. Actual**

Notes

Revenues

| | <i>Budget FY 2022</i> | <i>Budget Year-to-Date</i> | <i>Actual Year-to-Date</i> | <i>Budget vs. Actual</i> | <i>Variance Percentage</i> |
|--------------------------------------|---------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
| Operations Rate Revenue | \$ 18,810,555 | \$ 12,540,370 | \$ 12,700,716 | \$ 160,346 | 1.28% |
| Lease Revenue | 105,000 | 70,000 | 92,542 | 22,542 | 32.20% |
| Admin., Maint. & Engineering Revenue | C 553,000 | 368,667 | 902,880 | 534,214 | 144.90% |
| Other Revenues | 540,589 | 360,393 | 482,595 | 122,202 | 33.91% |
| Use of Reserves-GAC | 316,250 | 210,833 | 88,850 | (121,983) | -57.86% |
| Rate Stabilization Reserves | 200,000 | 133,333 | 133,333 | - | 0.00% |
| Interest Allocation | 8,200 | 5,467 | 8,693 | 3,226 | 59.02% |
| Total Operating Revenues | \$ 20,533,594 | \$ 13,689,063 | \$ 14,409,610 | \$ 720,547 | 5.26% |

Expenses

| | | | | | |
|------------------------------------|----------------------|----------------------|----------------------|---------------------|---------------|
| Personnel Cost | A, B \$ 9,649,988 | \$ 6,343,315 | \$ 6,215,986 | \$ 127,328 | 2.01% |
| Professional Services | C 712,050 | 474,700 | 1,002,587 | (527,887) | -111.20% |
| Other Services & Charges | F 3,111,400 | 2,074,267 | 2,023,343 | 50,923 | 2.46% |
| Communications | 191,412 | 127,608 | 136,970 | (9,362) | -7.34% |
| Information Technology | A, D 447,100 | 298,067 | 383,390 | (85,323) | -28.63% |
| Supplies | 42,160 | 28,107 | 24,556 | 3,550 | 12.63% |
| Operations & Maintenance | A, E 4,864,235 | 3,242,823 | 3,538,853 | (296,029) | -9.13% |
| Equipment Purchases | 615,250 | 410,167 | 195,748 | 214,419 | 52.28% |
| Depreciation | 900,000 | 600,000 | 600,000 | - | 0.00% |
| Reserve Transfers | - | - | - | - | - |
| Total Operating Expenses | \$ 20,533,595 | \$ 13,599,053 | \$ 14,121,434 | \$ (522,382) | -3.84% |
| Operating Surplus/(Deficit) | \$ (1) | \$ 90,010 | \$ 288,176 | | |

Debt Service Budget vs. Actual**Revenues**

| | | | | | |
|------------------------------------|----------------------|----------------------|----------------------|------------------|--------------|
| Debt Service Rate Revenue | \$ 18,193,960 | \$ 12,129,307 | \$ 12,129,320 | \$ 13 | 0.00% |
| Use of Reserves | - | - | - | - | - |
| Septage Receiving Support - County | 109,440 | 72,960 | 109,441 | 36,481 | 50.00% |
| Buck Mountain Lease Revenue | 1,600 | 1,067 | 282 | (784) | -73.54% |
| Trust Fund Interest | 33,700 | 22,467 | 8,810 | (13,657) | -60.79% |
| Reserve Fund Interest | 80,000 | 53,333 | 43,861 | (9,473) | -17.76% |
| Total Debt Service Revenues | \$ 18,418,700 | \$ 12,279,133 | \$ 12,291,713 | \$ 12,580 | 0.10% |

Debt Service Costs

| | | | | | |
|---------------------------------------|----------------------|----------------------|----------------------|-----------------|--------------|
| Total Principal & Interest | \$ 14,256,077 | \$ 9,504,051 | \$ 9,753,052 | \$ (249,000) | -2.62% |
| Reserve Additions-Interest | 80,000 | 53,333 | 43,861 | 9,473 | 17.76% |
| Debt Service Ratio Charge | 725,000 | 483,333 | 483,333 | - | 0.00% |
| Reserve Additions-CIP Growth | 3,357,634 | 2,238,423 | 1,989,422 | 249,000 | 11.12% |
| Total Debt Service Costs | \$ 18,418,711 | \$ 12,279,141 | \$ 12,269,668 | \$ 9,473 | 0.08% |
| Debt Service Surplus/(Deficit) | \$ (11) | \$ (7) | \$ 22,045 | | |

Summary

| | | | | | |
|--------------------------|----------------------|----------------------|----------------------|-------------------|---------------|
| Total Revenues | \$ 38,952,294 | \$ 25,968,196 | \$ 26,701,323 | \$ 733,127 | 2.82% |
| Total Expenses | 38,952,306 | 25,878,193 | 26,391,102 | (512,909) | -1.98% |
| Surplus/(Deficit) | \$ (12) | \$ 90,003 | \$ 310,221 | | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Urban Water Rate Center
Revenues and Expenses Summary

| <i>Budget FY 2022</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 | \$ 7,971,504 | \$ 5,314,336 | \$ 5,483,477 | \$ 169,141 | 3.18% |
| Lease Revenue | 75,000 | 50,000 | 67,470 | 17,470 | 34.94% |
| Miscellaneous | - | - | - | - | |
| Use of Reserves-GAC | 300,000 | 200,000 | 85,600 | (114,400) | -57.20% |
| Rate Stabilization Reserves | 100,000 | 66,667 | 66,667 | - | 0.00% |
| Interest Allocation | 3,400 | 2,267 | 3,599 | 1,332 | 58.78% |
| Total Operating Revenues | \$ 8,449,904 | \$ 5,633,269 | \$ 5,706,813 | \$ 73,544 | 1.31% |

Expenses

| | | | | | |
|------------------------------------|-----------------------|---------------------|---------------------|-------------------|--------------|
| Personnel Cost | B \$ 2,039,157 | \$ 1,341,748 | \$ 1,326,513 | \$ 15,236 | 1.14% |
| Professional Services | 279,200 | 186,133 | 114,221 | 71,912 | 38.63% |
| Other Services & Charges | 734,150 | 489,433 | 438,281 | 51,152 | 10.45% |
| Communications | 98,670 | 65,780 | 69,843 | (4,063) | -6.18% |
| Information Technology | 80,500 | 53,667 | 56,146 | (2,479) | -4.62% |
| Supplies | 5,100 | 3,400 | 4,347 | (947) | -27.85% |
| Operations & Maintenance | A 2,250,440 | 1,500,293 | 1,552,613 | (52,319) | -3.49% |
| Equipment Purchases | 15,400 | 10,267 | 10,267 | 0 | 0.00% |
| Depreciation | 300,000 | 200,000 | 200,000 | - | 0.00% |
| Reserve Transfers | - | - | - | - | |
| Subtotal Before Allocations | \$ 5,802,617 | \$ 3,850,722 | \$ 3,772,229 | \$ 78,492 | 2.04% |
| Allocation of Support Departments | 2,647,289 | 1,742,293 | 1,636,331 | 105,962 | 6.08% |
| Total Operating Expenses | \$ 8,449,906 | \$ 5,593,015 | \$ 5,408,560 | \$ 184,454 | 3.30% |
| Operating Surplus/(Deficit) | \$ (2) | \$ 40,255 | \$ 298,253 | | |

Debt Service Budget vs. Actual

Revenues

| | | | | | |
|------------------------------------|---------------------|---------------------|---------------------|--------------------|---------------|
| Debt Service Rate Revenue | \$ 7,621,725 | \$ 5,081,150 | \$ 5,081,152 | \$ 2 | 0.00% |
| Trust Fund Interest | 12,000 | 8,000 | 3,198 | (4,802) | -60.03% |
| Reserve Fund Interest | 39,300 | 26,200 | 21,536 | (4,664) | -17.80% |
| Use of Reserves | - | - | - | - | |
| Lease Revenue | 1,600 | 1,067 | 282 | (784) | -73.54% |
| Total Debt Service Revenues | \$ 7,674,625 | \$ 5,116,417 | \$ 5,106,168 | \$ (10,249) | -0.20% |

Debt Service Costs

| | | | | | |
|---------------------------------------|---------------------|---------------------|---------------------|-----------------|--------------|
| Total Principal & Interest | \$ 5,215,275 | \$ 3,476,850 | \$ 3,704,934 | \$ (228,084) | -6.56% |
| Reserve Additions-Interest | 39,300 | 26,200 | 21,536 | 4,664 | 17.80% |
| Debt Service Ratio Charge | 400,000 | 266,667 | 266,667 | - | 0.00% |
| Reserve Additions-CIP Growth | 2,020,050 | 1,346,700 | 1,118,616 | 228,084 | 16.94% |
| Total Debt Service Costs | \$ 7,674,625 | \$ 5,116,417 | \$ 5,111,752 | \$ 4,664 | 0.09% |
| Debt Service Surplus/(Deficit) | \$ - | \$ - | \$ (5,585) | | |

Rate Center Summary

| | | | | | |
|---------------------------------|---------------|------------------|-------------------|-----------|-------|
| Total Revenues | \$ 16,124,529 | \$ 10,749,686 | \$ 10,812,981 | \$ 63,295 | 0.59% |
| Total Expenses | 16,124,531 | 10,709,431 | 10,520,312 | 189,119 | 1.77% |
| Surplus/(Deficit) | \$ (2) | \$ 40,255 | \$ 292,668 | | |
| Costs per 1000 Gallons | \$ 2.49 | | \$ 2.31 | | |
| Operating and DS | \$ 4.75 | | \$ 4.50 | | |
| Thousand Gallons Treated | 3,397,700 | 2,265,133 | 2,337,373 | 72,240 | 3.19% |
| or | | | | | |
| Flow (MGD) | 9.309 | | 9.619 | | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Crozet Water Rate Center
Revenues and Expenses Summary

| <i>Budget FY 2022</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 | \$ 1,058,856 | \$ 705,904 | \$ 705,904 | \$ - | 0.00% |
| Lease Revenues | 30,000 | 20,000 | 25,072 | 5,072 | 25.36% |
| Use of Reserves-GAC | 13,000 | 8,667 | - | (8,667) | -100.00% |
| Interest Allocation | 500 | 333 | 504 | 171 | 51.26% |
| Total Operating Revenues | \$ 1,102,356 | \$ 734,904 | \$ 731,480 | \$ (3,424) | -0.47% |

Expenses

| | | | | | |
|------------------------------------|---------------------|-------------------|-------------------|--------------------|---------------|
| Personnel Cost | \$ 324,463 | \$ 213,503 | \$ 210,404 | \$ 3,098 | 1.45% |
| Professional Services | 15,100 | 10,067 | 24,342 | (14,276) | -141.81% |
| Other Services & Charges | 104,450 | 69,633 | 75,041 | (5,407) | -7.77% |
| Communications | 17,530 | 11,687 | 12,101 | (415) | -3.55% |
| Information Technology | 5,250 | 3,500 | 9,131 | (5,631) | -160.88% |
| Supplies | 1,500 | 1,000 | 633 | 367 | 36.68% |
| Operations & Maintenance | 296,900 | 197,933 | 205,559 | (7,625) | -3.85% |
| Equipment Purchases | 28,000 | 18,667 | 2,000 | 16,667 | 89.29% |
| Depreciation | 60,000 | 40,000 | 40,000 | - | 0.00% |
| Reserve Transfers | - | - | - | - | |
| Subtotal Before Allocations | \$ 853,193 | \$ 565,990 | \$ 579,211 | \$ (13,222) | -2.34% |
| Allocation of Support Departments | 249,161 | 163,997 | 153,985 | 10,012 | 6.11% |
| Total Operating Expenses | \$ 1,102,354 | \$ 729,987 | \$ 733,196 | \$ (3,209) | -0.44% |
| Operating Surplus/(Deficit) | \$ 2 | \$ 4,917 | \$ (1,716) | | |

Debt Service Budget vs. Actual

Revenues

| | | | | | |
|------------------------------------|---------------------|---------------------|---------------------|-------------------|---------------|
| Debt Service Rate Revenue | \$ 1,847,832 | \$ 1,231,888 | \$ 1,231,888 | \$ - | 0.00% |
| Trust Fund Interest | 2,900 | 1,933 | 740 | (1,193) | -61.72% |
| Use of Reserves | - | - | - | - | |
| Reserve Fund Interest | 2,500 | 1,667 | 1,360 | (307) | -18.42% |
| Total Debt Service Revenues | \$ 1,853,232 | \$ 1,235,488 | \$ 1,233,988 | \$ (1,500) | -0.12% |

Debt Service Costs

| | | | | | |
|---------------------------------------|---------------------|---------------------|---------------------|---------------|--------------|
| Total Principal & Interest | \$ 1,216,667 | \$ 811,111 | \$ 811,111 | \$ - | 0.00% |
| Reserve Additions-Interest | 2,500 | 1,667 | 1,360 | 307 | 18.42% |
| Reserve Additions-CIP Growth | 634,070 | 422,713 | 422,713 | - | 0.00% |
| Total Debt Service Costs | \$ 1,853,237 | \$ 1,235,491 | \$ 1,235,184 | \$ 307 | 0.02% |
| Debt Service Surplus/(Deficit) | \$ (5) | \$ (3) | \$ (1,197) | | |

Rate Center Summary

| | | | | | |
|---------------------------------|---------------|-----------------|-------------------|------------|--------|
| Total Revenues | \$ 2,955,588 | \$ 1,970,392 | \$ 1,965,468 | \$ (4,924) | -0.25% |
| Total Expenses | 2,955,591 | 1,965,478 | 1,968,381 | (2,902) | -0.15% |
| Surplus/(Deficit) | \$ (3) | \$ 4,914 | \$ (2,913) | | |
| Costs per 1000 Gallons | \$ 5.44 | | \$ 4.28 | | |
| Operating and DS | \$ 14.58 | | \$ 11.49 | | |
| Thousand Gallons Treated | 202,697 | 135,131 | 171,360 | 36,229 | 26.81% |
| Flow (MGD) | 0.555 | | 0.705 | | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Scottsville Water Rate Center
Revenues and Expenses Summary

| <i>Budget FY 2022</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 | \$ 514,704 | \$ 343,136 | \$ 343,136 | \$ - | 0.00% |
| Use of Reserves-GAC | 3,250 | 2,167 | 3,250 | 1,083 | 50.00% |
| Interest Allocation | 200 | 133 | 243 | 110 | 82.57% |
| Total Operating Revenues | \$ 518,154 | \$ 345,436 | \$ 346,629 | \$ 1,193 | 0.35% |

Expenses

| | | | | | |
|------------------------------------|-------------------|-------------------|--------------------|--------------------|----------------|
| Personnel Cost | \$ 195,695 | \$ 128,739 | \$ 128,237 | \$ 502 | 0.39% |
| Professional Services | 2,900 | 1,933 | 8,100 | (6,166) | -318.94% |
| Other Services & Charges | 28,100 | 18,733 | 23,013 | (4,279) | -22.84% |
| Communications | 4,930 | 3,287 | 4,631 | (1,344) | -40.89% |
| Information Technology | 1,250 | 833 | 11,914 | (11,081) | -1329.72% |
| Supplies | 770 | 513 | 71 | 443 | 86.23% |
| Operations & Maintenance | 87,200 | 58,133 | 80,062 | (21,929) | -37.72% |
| Equipment Purchases | 1,500 | 1,000 | 1,408 | (408) | -40.80% |
| Depreciation | 40,000 | 26,667 | 26,667 | 0 | 0.00% |
| Reserve Transfers | - | - | - | - | - |
| Subtotal Before Allocations | \$ 362,345 | \$ 239,839 | \$ 284,102 | \$ (44,263) | -18.46% |
| Allocation of Support Departments | 155,813 | 102,591 | 95,973 | 6,617 | 6.45% |
| Total Operating Expenses | \$ 518,158 | \$ 342,430 | \$ 380,075 | \$ (37,645) | -10.99% |
| Operating Surplus/(Deficit) | \$ (4) | \$ 3,006 | \$ (33,446) | | |

Debt Service Budget vs. Actual

Revenues

| | | | | | |
|------------------------------------|-------------------|------------------|------------------|-----------------|---------------|
| Debt Service Rate Revenue | \$ 138,888 | \$ 92,592 | \$ 92,592 | \$ - | 0.00% |
| Trust Fund Interest | 300 | 200 | 79 | (121) | -60.37% |
| Reserve Fund Interest | 1,200 | 800 | 658 | (142) | -17.77% |
| Total Debt Service Revenues | \$ 140,388 | \$ 93,592 | \$ 93,329 | \$ (263) | -0.28% |

Debt Service Costs

| | | | | | |
|---------------------------------------|-------------------|------------------|------------------|---------------|--------------|
| Total Principal & Interest | \$ 125,892 | \$ 83,928 | \$ 86,916 | \$ (2,988) | -3.56% |
| Reserve Additions-Interest | 1,200 | 800 | 658 | 142 | |
| Reserve Additions-CIP Growth | 13,299 | 8,866 | 5,878 | 2,988 | |
| Total Debt Service Costs | \$ 140,391 | \$ 93,594 | \$ 93,452 | \$ 142 | 0.15% |
| Debt Service Surplus/(Deficit) | \$ (3) | \$ (2) | \$ (123) | | |

Rate Center Summary

| | | | | | |
|---------------------------------|---------------|-----------------|--------------------|----------|--------|
| Total Revenues | \$ 658,542 | \$ 439,028 | \$ 439,959 | \$ 931 | 0.21% |
| Total Expenses | 658,549 | 436,024 | 473,527 | (37,503) | -8.60% |
| Surplus/(Deficit) | \$ (7) | \$ 3,004 | \$ (33,568) | | |
| Costs per 1000 Gallons | \$ 30.07 | | \$ 28.00 | | |
| Operating and DS | \$ 38.22 | | \$ 34.88 | | |
| Thousand Gallons Treated | 17,230 | 11,487 | 13,576 | 2,089 | 18.19% |
| or | | | | | |
| Flow (MGD) | 0.047 | | 0.056 | | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Urban Wastewater Rate Center
Revenues and Expenses Summary

| Budget FY 2022 | Budget Year-to-Date | Actual Year-to-Date | Budget vs. Actual | Variance Percentage |
|---------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|
|---------------------------|--------------------------------|--------------------------------|------------------------------|--------------------------------|

Operating Budget vs. Actual

| | | | | | | Notes |
|------------------------------------|---------------------|---------------------|---------------------|---------------------|---------------|-------|
| Revenues | | | | | | |
| Operations Rate Revenue | \$ 8,535,195 | \$ 5,690,130 | \$ 5,681,335 | \$ (8,795) | -0.15% | |
| Stone Robinson WWTP | 20,589 | 13,726 | 11,296 | (2,430) | -17.70% | |
| Septage Acceptance | 475,000 | 316,667 | 366,824 | 50,157 | 15.84% | |
| Nutrient Credits | 45,000 | 30,000 | 104,475 | 74,475 | 248.25% | |
| Rate Stabilization Reserve | 100,000 | 66,667 | 66,667 | - | 0.00% | |
| Miscellaneous Revenue | - | - | - | - | | |
| Interest Allocation | 3,800 | 2,533 | 4,025 | 1,492 | 58.88% | |
| Total Operating Revenues | \$ 9,179,584 | \$ 6,119,723 | \$ 6,234,621 | \$ 114,899 | 1.88% | |
| Expenses | | | | | | |
| Personnel Cost | A, B \$ 1,289,471 | \$ 847,956 | \$ 867,161 | \$ (19,205) | -2.26% | |
| Professional Services | 208,500 | 139,000 | 130,605 | 8,395 | 6.04% | |
| Other Services & Charges | F 2,011,700 | 1,341,133 | 1,363,994 | (22,861) | -1.70% | |
| Communications | 9,800 | 6,533 | 7,958 | (1,425) | -21.81% | |
| Information Technology | 56,500 | 37,667 | 45,073 | (7,406) | -19.66% | |
| Supplies | 1,200 | 800 | 1,225 | (425) | -53.09% | |
| Operations & Maintenance | A, E 1,672,520 | 1,115,013 | 1,391,810 | (276,796) | -24.82% | |
| Equipment Purchases | 294,250 | 196,167 | 67,823 | 128,343 | 65.43% | |
| Depreciation | 470,000 | 313,333 | 313,333 | (0) | 0.00% | |
| Reserve Transfers | - | - | - | - | | |
| Subtotal Before Allocations | \$ 6,013,941 | \$ 3,997,603 | \$ 4,188,983 | \$ (191,380) | -4.79% | |
| Allocation of Support Departments | 3,165,643 | 2,083,883 | 1,955,694 | 128,189 | 6.15% | |
| Total Operating Expenses | \$ 9,179,584 | \$ 6,081,486 | \$ 6,144,677 | \$ (63,191) | -1.04% | |
| Operating Surplus/(Deficit) | \$ (0) | \$ 38,237 | \$ 89,945 | | | |

Debt Service Budget vs. Actual

| | | | | | |
|---------------------------------------|---------------------|---------------------|---------------------|------------------|--------------|
| Revenues | | | | | |
| Debt Service Rate Revenue | \$ 8,568,221 | \$ 5,712,147 | \$ 5,712,152 | \$ 5 | 0.00% |
| Septage Receiving Support - County | 109,440 | 72,960 | 109,441 | 36,481 | 50.00% |
| Trust Fund Interest | 18,500 | 12,333 | 4,784 | (7,550) | -61.21% |
| Use of Reserves | - | - | - | - | |
| Reserve Fund Interest | 36,300 | 24,200 | 19,913 | (4,287) | -17.72% |
| Total Debt Service Revenues | \$ 8,732,461 | \$ 5,821,641 | \$ 5,846,289 | \$ 24,649 | 0.42% |
| Debt Service Costs | | | | | |
| Total Principal & Interest | \$ 7,689,212 | \$ 5,126,141 | \$ 5,141,828 | \$ (15,687) | -0.31% |
| Reserve Additions-Interest | 36,300 | 24,200 | 19,913 | 4,287 | 17.72% |
| Debt Service Ratio Charge | 325,000 | 216,667 | 216,667 | - | 0.00% |
| Reserve Additions-CIP Growth | 681,950 | 454,633 | 438,946 | 15,687 | 3.45% |
| Total Debt Service Costs | \$ 8,732,462 | \$ 5,821,641 | \$ 5,817,354 | \$ 4,287 | 0.07% |
| Debt Service Surplus/(Deficit) | \$ (1) | \$ (1) | \$ 28,935 | | |

Rate Center Summary

| | | | | | |
|---------------------------------|---------------|------------------|-------------------|------------|--------|
| Total Revenues | \$ 17,912,045 | \$ 11,941,363 | \$ 12,080,911 | \$ 139,547 | 1.17% |
| Total Expenses | 17,912,046 | 11,903,127 | 11,962,031 | (58,904) | -0.49% |
| Surplus/(Deficit) | \$ (1) | \$ 38,236 | \$ 118,880 | | |
| Costs per 1000 Gallons | \$ 2.71 | | \$ 2.72 | | |
| Operating and DS | \$ 5.28 | | \$ 5.30 | | |
| Thousand Gallons Treated | 3,390,400 | 2,260,267 | 2,257,185 | (3,082) | -0.14% |
| or | | | | | |
| Flow (MGD) | 9.289 | | 9.289 | | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Glenmore Wastewater Rate Center
Revenues and Expenses Summary

| <i>Budget FY 2022</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 | \$ | 404,028 | \$ | 269,352 | \$ | 269,352 | \$ | - | 0.00% |
| Rate Stabilization Reserve | | - | | - | | - | | - | |
| Interest Allocation | | 200 | | 133 | | 183 | | 49 | 36.94% |
| Total Operating Revenues | \$ | 404,228 | \$ | 269,485 | \$ | 269,535 | \$ | 49 | 0.02% |

Expenses

| | | | | | | | | | |
|------------------------------------|-----------|----------------|-----------|----------------|-----------|-----------------|-----------|-----------------|----------------|
| Personnel Cost | \$ | 94,885 | \$ | 62,398 | \$ | 63,949 | \$ | (1,551) | -2.49% |
| Professional Services | | 12,900 | | 8,600 | | 95,000 | | (86,400) | |
| Other Services & Charges | | 34,300 | | 22,867 | | 20,311 | | 2,555 | 11.17% |
| Communications | | 3,130 | | 2,087 | | 2,195 | | (108) | -5.20% |
| Information Technology | | 2,000 | | 1,333 | | 661 | | 672 | 50.42% |
| Supplies | | - | | - | | 69 | | (69) | |
| Operations & Maintenance | | 121,650 | | 81,100 | | 59,520 | | 21,580 | 26.61% |
| Equipment Purchases | | 3,800 | | 2,533 | | 2,533 | | (0) | 0.00% |
| Depreciation | | 10,000 | | 6,667 | | 6,667 | | 0 | 0.00% |
| Subtotal Before Allocations | \$ | 282,665 | \$ | 187,585 | \$ | 250,906 | \$ | (63,320) | -33.76% |
| Allocation of Support Departments | | 121,563 | | 80,071 | | 74,322 | | 5,749 | 7.18% |
| Total Operating Expenses | \$ | 404,229 | \$ | 267,656 | \$ | 325,227 | \$ | (57,571) | -21.51% |
| Operating Surplus/(Deficit) | \$ | (1) | \$ | 1,829 | \$ | (55,693) | | | |

Debt Service Budget vs. Actual

Revenues

| | | | | | | | | | |
|------------------------------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|----------|--------------|
| Debt Service Rate Revenue | \$ | 7,412 | \$ | 4,941 | \$ | 4,944 | \$ | 3 | 0.05% |
| Trust Fund Interest | | - | | - | | - | | - | |
| Reserve Fund Interest | | 200 | | 133 | | 132 | | (2) | -1.33% |
| Total Debt Service Revenues | \$ | 7,612 | \$ | 5,075 | \$ | 5,076 | \$ | 3 | 0.05% |

Debt Service Costs

| | | | | | | | | | |
|---------------------------------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|----------|--------------|
| Total Principal & Interest | \$ | 1,578 | \$ | 1,052 | \$ | 3,293 | \$ | (2,241) | -213.02% |
| Reserve Additions-CIP Growth | | 5,834 | | 3,889 | | 1,648 | | 2,241 | 57.62% |
| Reserve Additions-Interest | | 200 | | 133 | | 132 | | 2 | 1.33% |
| Total Debt Service Costs | \$ | 7,612 | \$ | 5,075 | \$ | 5,073 | \$ | 2 | 0.03% |
| Debt Service Surplus/(Deficit) | \$ | - | \$ | - | \$ | 3 | | | |

Rate Center Summary

| | | | | | | | | | |
|---------------------------------|-----------|------------|-----------|--------------|-----------|-----------------|----|----------|---------|
| Total Revenues | \$ | 411,840 | \$ | 274,560 | \$ | 274,610 | \$ | 50 | 0.02% |
| Total Expenses | | 411,841 | | 272,731 | | 330,300 | | (57,570) | -21.11% |
| Surplus/(Deficit) | \$ | (1) | \$ | 1,829 | \$ | (55,690) | | | |
| Costs per 1000 Gallons | \$ | 9.76 | | | \$ | 15.98 | | | |
| Operating and DS | \$ | 9.95 | | | \$ | 16.23 | | | |
| Thousand Gallons Treated | | 41,401 | | 27,601 | | 20,357 | | (7,244) | -26.24% |
| or | | | | | | | | | |
| Flow (MGD) | | 0.113 | | | | 0.084 | | | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Scottsville Wastewater Rate Center
Revenues and Expenses Summary

| <i>Budget FY 2022</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 | \$ 326,268 | \$ 217,512 | \$ 217,512 | \$ - | 0.00% |
| Interest Allocation | 100 | 67 | 139 | 72 | 108.56% |
| Total Operating Revenues | \$ 326,368 | \$ 217,579 | \$ 217,651 | \$ 72 | 0.03% |

Expenses

| | | | | | |
|------------------------------------|-------------------|-------------------|-------------------|--------------------|----------------|
| Personnel Cost | \$ 94,875 | \$ 62,392 | \$ 63,949 | \$ (1,557) | -2.50% |
| Professional Services | 10,250 | 6,833 | 1,067 | 5,767 | 84.39% |
| Other Services & Charges | 21,800 | 14,533 | 14,962 | (428) | -2.95% |
| Communications | 3,400 | 2,267 | 2,618 | (351) | -15.48% |
| Information Technology | 1,500 | 1,000 | 1,873 | (873) | -87.34% |
| Supplies | - | - | - | - | |
| Operations & Maintenance | E 58,100 | 38,733 | 57,584 | (18,851) | -48.67% |
| Equipment Purchases | 3,800 | 2,533 | 2,533 | (0) | 0.00% |
| Depreciation | 20,000 | 13,333 | 13,333 | (0) | 0.00% |
| Subtotal Before Allocations | \$ 213,725 | \$ 141,625 | \$ 157,919 | \$ (16,294) | -11.51% |
| Allocation of Support Departments | 112,640 | 74,187 | 68,899 | 5,289 | 7.13% |
| Total Operating Expenses | \$ 326,365 | \$ 215,813 | \$ 226,818 | \$ (11,005) | -5.10% |
| Operating Surplus/(Deficit) | \$ 3 | \$ 1,766 | \$ (9,167) | | |

Debt Service Budget vs. Actual

Revenues

| | | | | | |
|------------------------------------|------------------|-----------------|-----------------|----------------|---------------|
| Debt Service Rate Revenue | \$ 9,882 | \$ 6,588 | \$ 6,592 | \$ 4 | 0.06% |
| Trust Fund Interest | - | - | 9 | 9 | |
| Reserve Fund Interest | 500 | 333 | 263 | (70) | -21.04% |
| Total Debt Service Revenues | \$ 10,382 | \$ 6,921 | \$ 6,864 | \$ (57) | -0.83% |

Debt Service Costs

| | | | | | |
|---------------------------------------|------------------|-----------------|-----------------|--------------|--------------|
| Total Principal & Interest | \$ 7,453 | \$ 4,969 | \$ 4,969 | \$ - | 0.00% |
| Reserve Additions-Interest | 500 | 333 | 263 | 70 | 21.04% |
| Estimated New Principal & Interest | 2,431 | 1,621 | 1,621 | - | 0.00% |
| Total Debt Service Costs | \$ 10,384 | \$ 6,923 | \$ 6,853 | \$ 70 | 1.01% |
| Debt Service Surplus/(Deficit) | \$ (2) | \$ (1) | \$ 11 | | |

Rate Center Summary

| | | | | | |
|---------------------------------|-------------|-----------------|-------------------|----------|---------|
| Total Revenues | \$ 336,750 | \$ 224,500 | \$ 224,515 | \$ 15 | 0.01% |
| Total Expenses | 336,749 | 222,735 | 233,670 | (10,935) | -4.91% |
| Surplus/(Deficit) | \$ 1 | \$ 1,765 | \$ (9,155) | | |
| Costs per 1000 Gallons | \$ 13.80 | | \$ 20.49 | | |
| Operating and DS | \$ 14.24 | | \$ 21.11 | | |
| Thousand Gallons Treated | 23,643 | 15,762 | 11,070 | (4,692) | -29.77% |
| or | | | | | |
| Flow (MGD) | 0.065 | | 0.046 | | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Administration

| <i>Budget FY 2022</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**Revenues**

| | | | | | | |
|---|---|-------------------|-------------------|-------------------|-------------------|----------------|
| Payment for Services SWA | | \$ 551,000 | \$ 367,333 | \$ 369,336 | \$ 2,003 | 0.55% |
| Bond Proceeds Funding Bond Issuance Costs | C | - | - | 518,307 | 518,307 | |
| Miscellaneous Revenue | | 2,000 | 1,333 | 13,610 | 12,277 | 920.76% |
| Total Operating Revenues | | \$ 553,000 | \$ 368,667 | \$ 901,253 | \$ 532,587 | 144.46% |

Expenses

| | | | | | | |
|---------------------------------|------|---------------------|---------------------|---------------------|---------------------|----------------|
| Personnel Cost | | \$ 2,177,998 | \$ 1,430,570 | \$ 1,387,424 | \$ 43,147 | 3.02% |
| Professional Services | C | 163,200 | 108,800 | 625,062 | (516,262) | -474.51% |
| Other Services & Charges | | 86,200 | 57,467 | 63,111 | (5,644) | -9.82% |
| Communications | | 21,000 | 14,000 | 17,836 | (3,836) | -27.40% |
| Information Technology | A, D | 171,900 | 114,600 | 185,560 | (70,960) | -61.92% |
| Supplies | | 21,500 | 14,333 | 13,949 | 385 | 2.68% |
| Operations & Maintenance | | 68,600 | 45,733 | 27,919 | 17,814 | 38.95% |
| Equipment Purchases | | 25,200 | 16,800 | 10,133 | 6,667 | 39.68% |
| Depreciation | | - | - | - | - | |
| Total Operating Expenses | | \$ 2,735,598 | \$ 1,802,304 | \$ 2,330,994 | \$ (528,690) | -29.33% |

Department Summary

| | | | | | | |
|--|---------|-----------------------|-----------------------|-----------------------|-------------------|--------------|
| Net Costs Allocable to Rate Centers | | \$ (2,182,598) | \$ (1,433,637) | \$ (1,429,741) | \$ (3,896) | 0.27% |
| Allocations to the Rate Centers | | | | | | |
| Urban Water | 44.00% | \$ 960,343 | \$ 630,800 | \$ 629,086 | \$ 1,714 | |
| Crozet Water | 4.00% | \$ 87,304 | \$ 57,345 | \$ 57,190 | \$ 156 | |
| Scottsville Water | 2.00% | \$ 43,652 | \$ 28,673 | \$ 28,595 | \$ 78 | |
| Urban Wastewater | 48.00% | \$ 1,047,647 | \$ 688,146 | \$ 686,276 | \$ 1,870 | |
| Glenmore Wastewater | 1.00% | \$ 21,826 | \$ 14,336 | \$ 14,297 | \$ 39 | |
| Scottsville Wastewater | 1.00% | \$ 21,826 | \$ 14,336 | \$ 14,297 | \$ 39 | |
| | 100.00% | \$ 2,182,598 | \$ 1,433,637 | \$ 1,429,741 | \$ 3,896 | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Maintenance

| <i>Budget FY 2022</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

Payment for Services SWA
Miscellaneous Revenue

Total Operating Revenues

| | | | | |
|-------------|-------------|---------------|---------------|------|
| \$ - | \$ - | \$ - | \$ - | \$ - |
| - | - | 623 | 623 | |
| \$ - | \$ - | \$ 623 | \$ 623 | |

Expenses

Personnel Cost
Professional Services
Other Services & Charges
Communications
Information Technology
Supplies
Operations & Maintenance
Equipment Purchases
Depreciation

E

Total Operating Expenses

| | | | | |
|---------------------|---------------------|---------------------|------------------|--------------|
| \$ 1,398,597 | \$ 919,264 | \$ 899,503 | \$ 19,762 | 2.15% |
| - | - | - | - | |
| 61,200 | 40,800 | 13,527 | 27,273 | 66.85% |
| 15,730 | 10,487 | 11,076 | (590) | -5.62% |
| 9,500 | 6,333 | 713 | 5,620 | 88.74% |
| 2,000 | 1,333 | 320 | 1,013 | 75.97% |
| 89,600 | 59,733 | 76,517 | (16,783) | -28.10% |
| 208,100 | 138,733 | 83,583 | 55,150 | 39.75% |
| - | - | - | - | |
| \$ 1,784,727 | \$ 1,176,684 | \$ 1,085,240 | \$ 91,445 | 7.77% |

Department Summary

Net Costs Allocable to Rate Centers

| | | | | |
|-----------------------|-----------------------|-----------------------|--------------------|--------------|
| \$ (1,784,727) | \$ (1,176,684) | \$ (1,084,617) | \$ (90,822) | 7.72% |
|-----------------------|-----------------------|-----------------------|--------------------|--------------|

Allocations to the Rate Centers

| | | | | | |
|------------------------|---------|---------------------|---------------------|---------------------|------------------|
| Urban Water | 30.00% | \$ 535,418 | \$ 353,005 | \$ 325,385 | \$ 27,620 |
| Crozet Water | 3.50% | 62,465 | 41,184 | 37,962 | 3,222 |
| Scottsville Water | 3.50% | 62,465 | 41,184 | 37,962 | 3,222 |
| Urban Wastewater | 56.50% | 1,008,371 | 664,827 | 612,809 | 52,018 |
| Glenmore Wastewater | 3.50% | 62,465 | 41,184 | 37,962 | 3,222 |
| Scottsville Wastewater | 3.00% | 53,542 | 35,301 | 32,539 | 2,762 |
| | 100.00% | \$ 1,784,727 | \$ 1,176,684 | \$ 1,084,617 | \$ 92,068 |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Laboratory

| Budget FY 2022 | Budget Year-to-Date | Actual Year-to-Date | Budget vs. Actual | Variance Percentage |
|-------------------|------------------------|------------------------|----------------------|------------------------|
|-------------------|------------------------|------------------------|----------------------|------------------------|

Operating Budget vs. Actual

Notes

Revenues

N/A

Expenses

| | | | | | |
|---------------------------------|-------------------|-------------------|-------------------|------------------|---------------|
| Personnel Cost | \$ 411,037 | \$ 270,072 | \$ 248,718 | \$ 21,354 | 7.91% |
| Professional Services | - | - | - | - | |
| Other Services & Charges | 7,900 | 5,267 | 3,540 | 1,727 | 32.79% |
| Communications | 1,300 | 867 | 796 | 71 | |
| Information Technology | 200 | 133 | 610 | (477) | -357.50% |
| Supplies | 1,300 | 867 | 1,166 | (299) | -34.55% |
| Operations & Maintenance | 120,590 | 80,393 | 58,627 | 21,767 | 27.08% |
| Equipment Purchases | 1,700 | 1,133 | 1,133 | (0) | 0.00% |
| Depreciation | - | - | - | - | |
| Total Operating Expenses | \$ 544,027 | \$ 358,732 | \$ 314,590 | \$ 44,142 | 12.31% |

Department Summary

| | | | | | | |
|---|---------|---------------------|---------------------|---------------------|--------------------|---------------|
| Net Costs Allocable to Rate Centers | | \$ (544,027) | \$ (358,732) | \$ (314,590) | \$ (44,142) | 12.31% |
| <u>Allocations to the Rate Centers</u> | | | | | | |
| Urban Water | 44.00% | \$ 239,372 | \$ 157,842 | \$ 138,420 | \$ 19,423 | |
| Crozet Water | 4.00% | 21,761 | 14,349 | 12,584 | 1,766 | |
| Scottsville Water | 2.00% | 10,881 | 7,175 | 6,292 | 883 | |
| Urban Wastewater | 47.00% | 255,693 | 168,604 | 147,857 | 20,747 | |
| Glenmore Wastewater | 1.50% | 8,160 | 5,381 | 4,719 | 662 | |
| Scottsville Wastewater | 1.50% | 8,160 | 5,381 | 4,719 | 662 | |
| | 100.00% | \$ 544,027 | \$ 358,732 | \$ 314,590 | \$ 44,142 | |

Rivanna Water & Sewer Authority
Monthly Financial Statements - February 2022

Engineering

| <i>Budget FY 2022</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

Payment for Services SWA

Total Operating Revenues

| | | | | |
|-------------|-------------|-----------------|-----------------|--|
| \$ - | \$ - | \$ 1,004 | \$ 1,004 | |
| \$ - | \$ - | \$ 1,004 | \$ 1,004 | |

Expenses

Personnel Cost

Professional Services

Other Services & Charges

Communications

Information Technology

Supplies

Operations & Maintenance

Equipment Purchases

Depreciation & Capital Reserve Transfers

Total Operating Expenses

| | | | | |
|---------------------|---------------------|---------------------|-------------------|--------------|
| \$ 1,623,810 | \$ 1,066,670 | \$ 1,020,128 | \$ 46,542 | 4.36% |
| 20,000 | 13,333 | 4,191 | 9,143 | 68.57% |
| 21,600 | 14,400 | 7,564 | 6,836 | 47.47% |
| 15,922 | 10,615 | 7,916 | 2,699 | 25.42% |
| 118,500 | 79,000 | 71,708 | 7,292 | 9.23% |
| 8,790 | 5,860 | 2,776 | 3,084 | 52.62% |
| 98,635 | 65,757 | 28,643 | 37,113 | 56.44% |
| 33,500 | 22,333 | 14,333 | 8,000 | 35.82% |
| - | - | - | - | |
| \$ 1,940,757 | \$ 1,277,968 | \$ 1,157,260 | \$ 120,708 | 9.45% |

Department Summary

Net Costs Allocable to Rate Centers

| | | | | |
|----------------|----------------|----------------|--------------|-------|
| \$ (1,940,757) | \$ (1,277,968) | \$ (1,156,256) | \$ (119,704) | 9.37% |
|----------------|----------------|----------------|--------------|-------|

Allocations to the Rate Centers

Urban Water

Crozet Water

Scottsville Water

Urban Wastewater

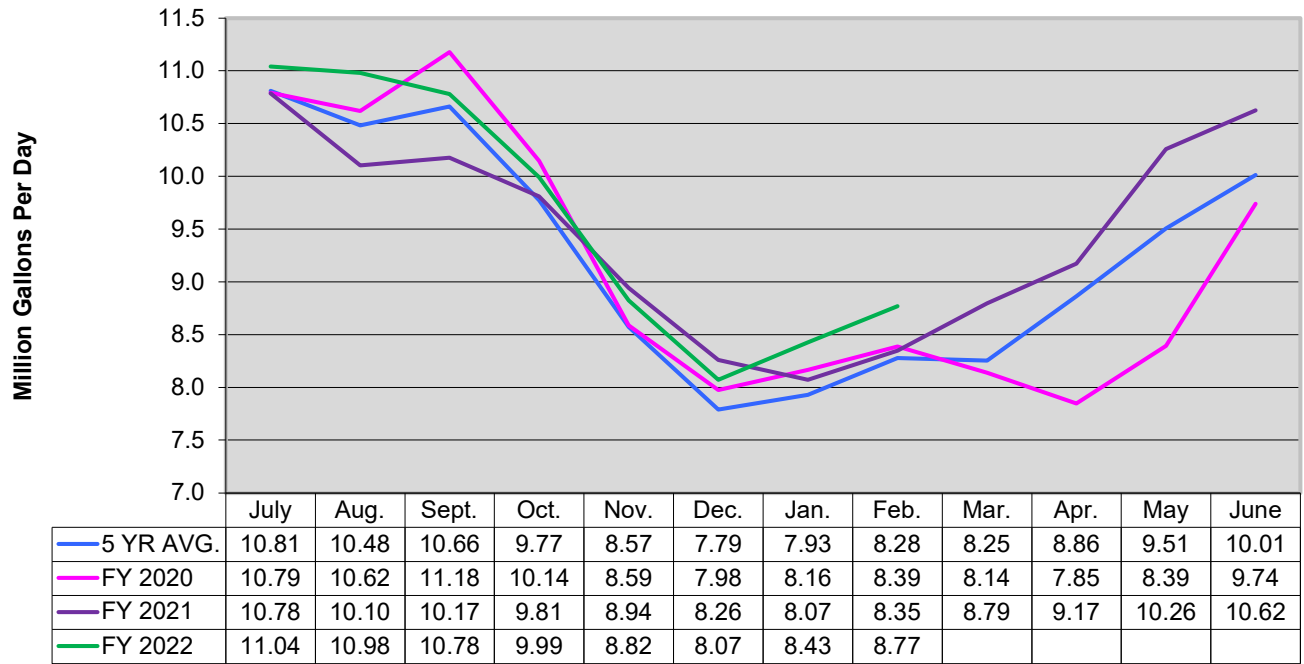
Glenmore Wastewater

Scottsville Wastewater

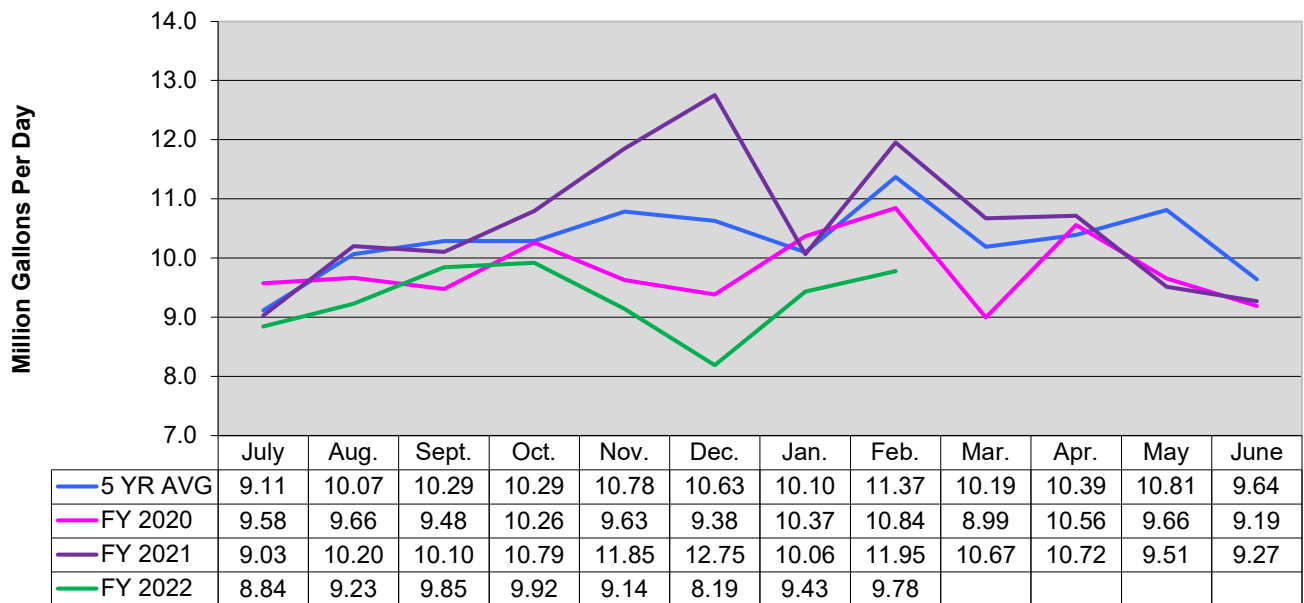
| | | | | |
|---------|---------------------|---------------------|---------------------|-------------------|
| 47.00% | \$ 912,156 | \$ 600,645 | \$ 543,440 | \$ 57,205 |
| 4.00% | 77,630 | 51,119 | 46,250 | 4,868 |
| 2.00% | 38,815 | 25,559 | 23,125 | 2,434 |
| 44.00% | 853,933 | 562,306 | 508,753 | 53,553 |
| 1.50% | 29,111 | 19,170 | 17,344 | 1,826 |
| 1.50% | 29,111 | 19,170 | 17,344 | 1,826 |
| 100.00% | \$ 1,940,757 | \$ 1,277,968 | \$ 1,156,256 | \$ 121,712 |

**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

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: OPERATIONS REPORT FOR MARCH 2022

DATE: APRIL 26, 2022

WATER OPERATIONS:

The average and maximum daily water volumes produced in March 2022 were as follows:

| <i>Water Treatment Plant</i> | <i>Average Daily Production (MGD)</i> | <i>Maximum Daily Production in the Month (MGD)</i> |
|------------------------------|---|--|
| South Rivanna | 7.38 | 8.49 (3/17/2022) |
| Observatory | 0.83 | 2.89 (3/24/2022) |
| North Rivanna | <u>0.37</u> | <u>0.41 (3/28/2022)</u> |
| Urban Total | 8.58 | 9.74 (3/17/2022) |
| Crozet | 0.59 | 0.67 (3/5/2022) |
| Scottsville | 0.06 | 0.09 (3/28/2022) |
| Red Hill | <u>0.0013</u> | 0.002 (3/15/2022) |
| RWSA Total | 9.23 | - |

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

Status of Reservoirs (as of April 20, 2022):

- Urban Reservoirs: 100% of Total Useable Capacity
- Ragged Mountain Reservoir is not full (100%)
- Sugar Hollow Reservoir is full (100%)
- South Rivanna Reservoir is full (100%)
- Beaver Creek Reservoir is full (100%)
- Totier Creek Reservoir is full (100%)

WASTEWATER OPERATIONS:

All RWSA Water Resource Recovery Facilities (WRRFs) were in regulatory compliance with their effluent limitations during March 2022. Performance of the WRRFs in March was as follows compared to the respective VDEQ permit limits:

| <i>WRRF</i> | <i>Average Daily Effluent Flow (MGD)</i> | <i>Average CBOD₅ (ppm)</i> | | <i>Average Total Suspended Solids (ppm)</i> | | <i>Average Ammonia (ppm)</i> | |
|-----------------------|--|---------------------------------------|--------------|---|--------------|------------------------------|--------------|
| | | <i>RESULT</i> | <i>LIMIT</i> | <i>RESULT</i> | <i>LIMIT</i> | <i>RESULT</i> | <i>LIMIT</i> |
| Moores Creek | 10.23 | 1.0 | 10 | <QL | 22 | 0.21 | 2.2 |
| Glenmore | 0.116 | 1.6 | 15 | 2.5 | 30 | NR | NL |
| Scottsville | 0.066 | 1.8 | 25 | 6.6 | 30 | NR | NL |
| Stone Robinson | 0.0017 | NR | 30 | NR | 30 | NR | NL |

NR = Not Required

NL = No Limit

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

Nutrient discharges at the Moores Creek AWRRF were as follows for March 2022.

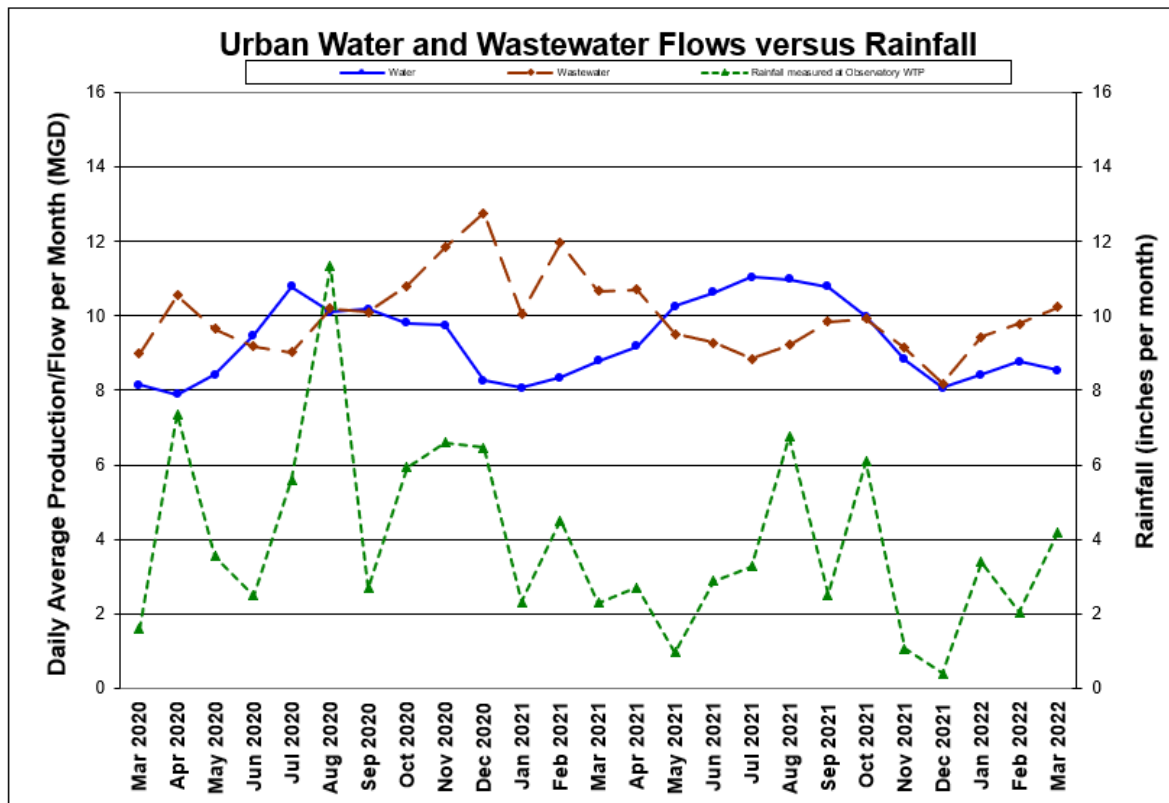
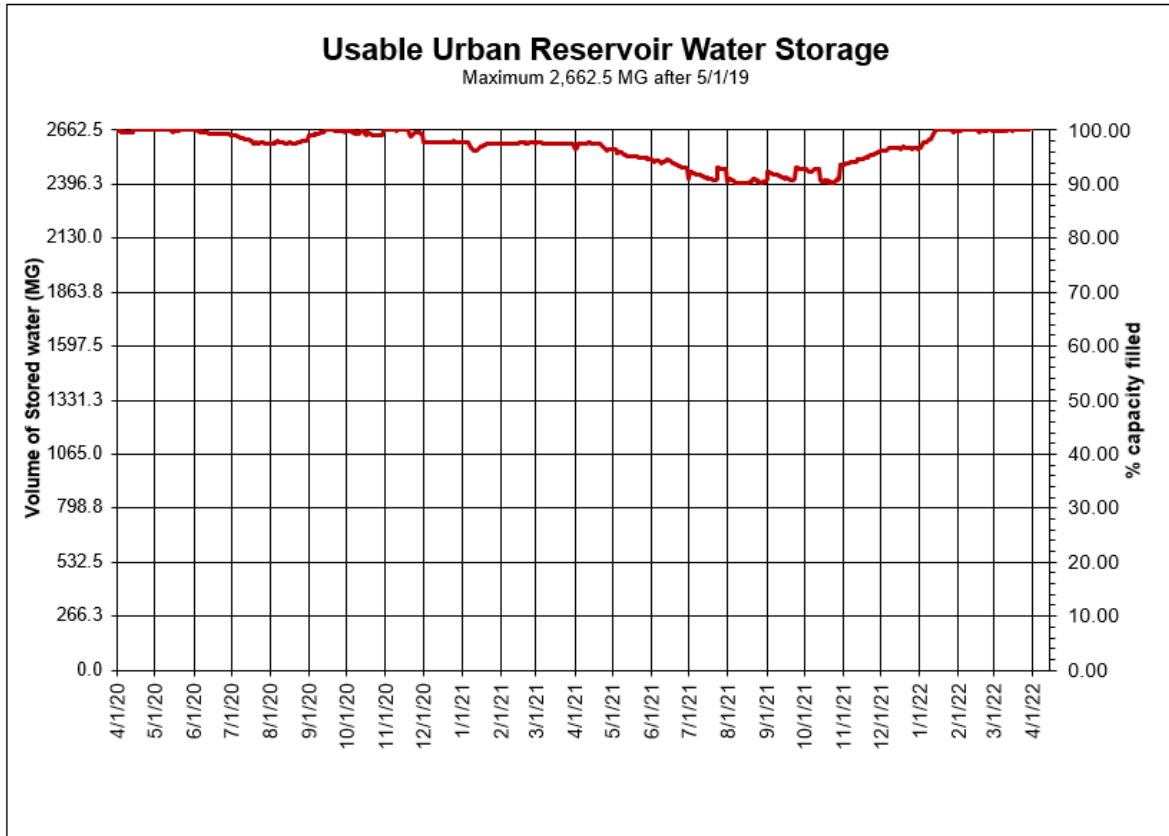
| <i>State Annual Allocation (lb./yr.) Permit</i> | | <i>Average Monthly Allocation (lb./mo.) *</i> | <i>Moores Creek Discharge March (lb./mo.)</i> | <i>Performance as % of monthly average Allocation*</i> | <i>Year to Date Performance as % of annual allocation</i> |
|---|---------|---|---|--|---|
| Nitrogen | 282,994 | 23,583 | 9,115 | 39% | 9% |
| Phosphorous | 18,525 | 1,544 | 535 | 35% | 6% |

*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: STATUS REPORT: ONGOING PROJECTS

DATE: APRIL 26, 2022

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

For the current, approved CIP, please visit: <https://www.rivanna.org/wp-content/uploads/2021/06/2022-2026-CIP-Final.pdf>

Under Construction

1. South Rivanna and Observatory Water Treatment Plant Renovations
2. Crozet Flow Equalization Tank
3. MC Aluminum Slide Gate Replacements
4. MC Exterior Lighting Improvements
5. MC Clarifier and Silo Demolition
6. Glenmore WRRF Influent Pump & VFD Addition
7. Airport Road Water Pump Station and Piping
8. MC 5kV Electrical System Upgrades
9. Scottville WTP Lagoon Liners Replacement

Design and Bidding

10. Ragged Mtn Reservoir to Observatory WTP Raw Water Line and Pump Station
11. South Rivanna to Ragged Mtn. Raw Water Line – Birdwood to Old Garth
12. Beaver Creek Dam, Pump Station and Piping Improvements
13. South Rivanna River Crossing
14. Central Water Line
15. Upper Schenks Branch Interceptor, Phase II
16. Red Hill Water Treatment Plant Upgrades
17. Emmet Street Water Line Betterment

Planning and Studies

18. South Rivanna Reservoir to Ragged Mtn Reservoir Water Line Right-of-Way

19. Urban Finished Water Infrastructure Master Plan
20. Asset Management Plan
21. MC Facilities Master Plan
22. SRR to RMR Pipeline – Pretreatment Pilot Study

Other Significant Projects

23. Urgent and Emergency Repairs
24. Interceptor Sewer & Manhole Repair
25. Security Enhancements

Under Construction

1. South Rivanna and Observatory Water Treatment Plant Renovations

| | |
|--|---|
| Design Engineer: | Short Elliot Hendrickson, Inc. (SEH) |
| Construction Contractor: | English Construction Company (Lynchburg, VA) |
| Construction Start: | May 2020 |
| Percent Complete: | 57% |
| Base Construction Contract + | |
| Change Orders to Date = Current Value: | $\$36,748,500 + \$718,669.49 = \$37,467,169.49$ |
| Completion: | May 2023 |
| Budget: | \$43,000,000 |

Current Status: Work continues on the SRWTP Administration Building, piping work in the Filter Building, and improvements at the Raw Water Pump Station. Work at the OBWTP includes the new Chemical Storage Building, sedimentation basin improvements and a large retaining wall.

2. Crozet Flow Equalization Tank

| | |
|--|--|
| Design Engineer: | Schnabel Engineering |
| Construction Contractor: | Anderson Construction (Lynchburg, VA) |
| Construction Start: | September 2020 |
| Percent Complete: | 91% |
| Based Construction Contract + | |
| Change Orders to Date = Current Value: | $\$4,406,300 + \$71,916.31 = \$4,478,216.31$ |
| Completion: | June 2022 |
| Budget: | \$5,400,000 |

Current Status: Final construction of the tank continues with only completion of the tank dome, additional leak testing, and painting remaining. The new pumps are set on bases, but the new motors and variable speed drives are not yet complete. SCADA and control work is in progress.

3. MC Aluminum Slide Gate Replacements

| | |
|--------------------------|----------------------------------|
| Design Engineer: | Hazen and Sawyer |
| Construction Contractor: | Waco Incorporated (Sandston, VA) |

| | |
|--|--|
| Construction Start: | September 2020 |
| Percent Complete: | 95% |
| Base Construction Contract + | |
| Change Orders to Date = Current Value: | $\$373,600 + \$32,050.02 = \$405,650.02$ |
| Completion: | April 2022 |
| Budget: | \$675,000 |

Current Status: Final calibration of the actuators at the headworks and project closeout is anticipated this month. The contractor for the Moores Creek Pump Station slide gate inspection needs to resubmit a final report to recommend the repairs and budget needed to complete the slide gate repair.

4. MC Exterior Lighting Improvements

| | |
|---------------------------------------|---|
| Design Engineer: | Hazen and Sawyer |
| Construction Contractor: | Pyramid Electrical Contractors (Richmond, VA) |
| Construction Start: | April 2021 |
| Percent Complete: | 95% |
| Base Construction Contract + | |
| Change Order to Date = Current Value: | $\$349,000 + \$17,598.30 = \$366,598.30$ |
| Completion: | June 2022 |
| Budget: | \$600,000 |

Current Status: Replacement of lighting fixtures around the aeration basins has been completed. Final lighting modifications are underway and will be completed in 1-2 months.

5. MC Clarifier and Lime Silo Demolition

| | |
|---------------------------------------|---|
| Design Engineer: | Hazen and Sawyer |
| Construction Contractor: | Pleasant View Developers (Staunton, VA) |
| Construction Start: | November 2021 |
| Percent Complete: | 30% |
| Base Construction Contract + | |
| Change Order to Date = Current Value: | \$649,000 |
| Completion: | August 2022 |
| Budget: | \$790,000 |

Current Status: Contractor has removed the lime silo, and is working on demolition of the clarifiers.

6. Glenmore WRRF Influent Pump and VFD Addition

| | |
|---------------------------------------|----------------------|
| Design Engineer: | Wiley Wilson |
| Construction Contractor: | MEB (Chesapeake, VA) |
| Construction Start: | September 2021 |
| Percent Complete: | 5% |
| Base Construction Contract + | |
| Change Order to Date = Current Value: | \$288,000 |
| Completion: | October 2022 |
| Budget: | \$370,000 |

Current Status: The contractor anticipates mobilizing to the site in April following delivery of materials.

7. Airport Road Water Pump Station and Piping

| | |
|---|---|
| Design Engineer: | Short Elliot Hendrickson (SEH) |
| Construction Contractor: | Anderson Construction, Inc. (ACI) (Lynchburg, VA) |
| Construction Start: | December 2021 |
| Percent Complete: | 5% |
| Base Construction Contract + Change Order to Date = Current Value: | \$8,520,312.50 |
| Completion: | December 2023 |
| Budget: | \$10,000,000 |

Current Status: ACI has acquired enough ductile iron pipe to begin work on the “Kohl’s site”. The contractor is surveying the alignment, installing E&S facilities, and will begin pipe installation this month.

8. MC 5kV Electrical System Upgrades

| | |
|---|---|
| Design Engineer: | Hazen and Sawyer (Hazen) |
| Construction Contractor: | Pyramid Electrical Contractors (Richmond, VA) |
| Construction Start: | May 2022 |
| Percent Complete: | 0% |
| Base Construction Contract + Change Order to Date = Current Value: | \$3,905,000 |
| Completion: | June 2024 |
| Budget: | \$5,050,000 |

Current Status: A Notice of Award was issued on March 4, 2022. Negotiations continue with the low-bidder. A Notice to Proceed will be issued following execution of the Contract.

9. Scottsville WTP Lagoon Liner Replacement

| | |
|---|---|
| Design Engineer: | Wiley Wilson |
| Construction Contractor: | Haren Construction Company, Inc. (Etowah, TN) |
| Construction Start: | May 2022 |
| Percent Complete: | 0% |
| Base Construction Contract + Change Order to Date = Current Value: | \$448,000 |
| Completion: | May 2023 |
| Budget: | \$540,000 |

Current Status: A Pre-Construction Meeting and a Notice to Proceed will be completed in May.

Design and Bidding

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

| | |
|---------------------|--|
| Design Engineer: | Michael Baker International (Baker) (Right of Way) |
| Design Engineer: | Kimley-Horn (Design) |
| Project Start: | August 2018 |
| Project Status: | Easement Acquisition & Design (11%) |
| Construction Start: | 2025 |
| Completion: | 2028 |
| Budget: | \$29,375,000 |

Current Status: Preparation of engineering plans and specifications is underway. Topographic survey work to the East of the proposed pump station site continues, as well as stake out on UVA Foundation Property to further easement negotiations. 50% plans for the water line between Ragged Mountain Reservoir and UVA Foundation Property have been submitted to staff for review. A technical memorandum summarizing pump sizing and hydraulic requirements for the pump station has been submitted to staff for review. Easement negotiations with one private owner, UVA, and the UVA Foundation continue.

11. South Rivanna Reservoir to Ragged Mtn. Reservoir Raw Water Line – Birdwood to Old Garth

| | |
|---------------------|-------------|
| Design Engineer: | Kimley-Horn |
| Project Start: | June 2021 |
| Project Status: | 90% Design |
| Construction Start: | Summer 2022 |
| Completion: | 2023 |
| Budget: | \$1,980,000 |

Current Status: Preparation of engineering plans and specifications is substantially complete for a 0.25-mile section of this 36” raw water pipe from Birdwood to Old Garth Road. One remaining easement is under negotiation with the UVA Foundation for this phase of the project. Design documents have been submitted to local regulatory authorities for review. Finalization of permits, design, and bidding are currently on hold awaiting the final UVAF easement.

12. Beaver Creek Dam, Pump Station and Piping Improvements

| | |
|---------------------|-------------------------------|
| Design Engineer: | Schnabel Engineering (Dam) |
| Design Engineer: | Hazen & Sawyer (Pump Station) |
| Project Start: | February 2018 |
| Project Status: | 73% NRCS Planning Process |
| Construction Start: | 2024 |
| Completion: | 2027 |
| Budget: | \$30,870,000 |

Current Status: Staff are moving forward with development of a Joint Permit Application and supporting documents for submission to DEQ by June. Remaining NRCS requirements, including review and approval of the planning study, are scheduled for completion by December 2022. An

application for design funding from NRCS will be submitted in 2022.

13. South Rivanna River Crossing

| | |
|---------------------|-------------------------------------|
| Design Engineer: | Michael Baker International (Baker) |
| Project Start: | November 2020 |
| Project Status: | 35% Design |
| Construction Start: | January 2023 |
| Completion: | April 2024 |
| Budget: | \$5,850,000 |

Current Status: Baker has recommended a water line route that will cross the river parallel to the west side of the Berkmar Bridge and follow Rio Mills Road until it intersects the new 24” water line in Route 29 and they are proceeding to prepare 50% design documents.

14. Central Water Line

| | |
|---------------------|-------------------------------------|
| Design Engineer: | Michael Baker International (Baker) |
| Project Start: | July 2021 |
| Project Status: | 5% Design |
| Construction Start: | 2024 |
| Completion: | 2028 |
| Budget: | \$31,000,000 |

Current Status: Survey and utility designation work is ongoing along the proposed 5-mile alignment. This piping project will extend from the Stadium Road area to the Long Street / E. High Street bridge. Informational meetings have been completed with the Belmont-Carlton, Fifeville, Fry’s Spring, Johnson Village, Martha Jefferson, Little High, and Woolen Mills neighborhood associations. We have also mailed about 480 letters and a “Project Fact Sheet” to all properties located directly along the entire proposed alignment. In addition, we have reached out to the Ridge Street and JPA Neighborhood Associations, Mount Zion Baptist Church, First Steps Infant Development, and Charlottesville Day School, as well as to the Piedmont Housing Alliance, Public Housing Area Residents, and the Charlottesville Redevelopment and Housing Authority.

15. Upper Schenks Branch Interceptor, Phase II

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

Current Status: A revised draft alignment of the sewer line to be installed within easements and out of the roadway has been completed and provided to the City of Charlottesville and Albemarle County for review. Pending review, a determination will be made regarding whether the line will be installed in McIntire Road or an easement adjacent to the road.

16. Red Hill Water Treatment Plant Upgrades

| | |
|---------------------|--------------------------------|
| Design Engineer: | Short Elliot Hendrickson (SEH) |
| Project Start: | May 2022 |
| Project Status: | Design |
| Construction Start: | September 2022 |
| Completion: | September 2023 |
| Budget: | \$400,000 |

Current Status: A work authorization is being negotiated with the design engineer.

17. Emmet Street Water Line Betterment

| | |
|------------------|---|
| Design Engineer: | Whitman, Requardt & Associates (WRA) |
| Project Start: | September 2021 |
| Project Status: | Contemplative Commons – Preconstruction Emmet Streetscape – Preliminary Design |
| Completion: | 2030 |
| Budget: | \$1,000,000 |

Current Status: Upgrading a section of 16” water main in Emmet Street to 30” as part of the UVA Ivy Corridor Public Realm project is complete. Upgrading a section of 16” water main adjacent to the Dell Pond to 30” as part of the UVA Contemplative Commons project is expected to start in June or July 2022. WRA and RWSA are developing a scope of work for design of a 24-30” water main in Emmet Street as part of the City’s Emmet Streetscape Phase I project. Lastly, WRA has developed a draft technical memorandum detailing additional opportunities for betterment along Emmet Street, which is under review and is expected to be finalized this spring for CIP planning purposes.

Planning and Studies

18. South Rivanna Reservoir to Ragged Mtn. Reservoir Water Line Right-of-Way

| | |
|------------------|-------------------------------------|
| Design Engineer: | Michael Baker International (Baker) |
| Project Start: | October 2017 |
| Project Status: | Easement Acquisition |
| Completion: | 2022 |
| Budget: | \$2,295,000 |

Current Status: Progress continues in our efforts to acquire the 8 miles of easements and agreements (with VDOT) for this 36” water line. Discussions continue for remaining easements with the UVA Foundation and one final private property owner.

19. Urban Finished Water Infrastructure Master Plan

| | |
|------------------|-------------------------------------|
| Design Engineer: | Michael Baker International (Baker) |
| Project Start: | November 2018 |
| Project Status: | 99% complete |

| | |
|-------------|------------|
| Completion: | April 2022 |
| Budget: | \$253,000 |

Current Status: Baker is incorporating stakeholder comments into the master plan for completion this month. Presentation to the Board is planned for May.

20. Asset Management Plan

| | |
|------------------|--------------------------------------|
| Design Engineer: | GHD, Inc. (GHD) |
| Project Start: | July 2018 |
| Project Status: | CMMS Implementation – 74% Complete |
| Completion: | CMMS Implementation – September 2022 |
| Budget: | \$1,180,000 |

Current Status: For implementation of the new CMMS, GHD is completing updates to our facility geodatabase and continuing the software configuration process. Upgrades to both our ESRI and Cityworks software were necessary for security improvements, which has extended the overall implementation schedule as those upgrades are completed. Discussions related to Phase 3 of RWSA's overall Asset Management Program have begun with additional work authorizations to follow towards this effort.

21. MC Facilities Master Plan Supplement

| | |
|--------------------|--------------------------|
| Design Consultant: | Hazen and Sawyer (Hazen) |
| Project Start: | February 2022 |
| Project Status: | 10% Complete |
| Completion: | August 2022 |
| Budget: | \$45,000 |

Current Status: The master plan has been finalized. Data collection work has begun on a supplement to include the impact of the recent wastewater collection system flow allocation analysis.

22. SRR to RMR Pipeline – Pretreatment Pilot Study

| | |
|--------------------|---|
| Design Consultant: | SEH |
| Project Start: | August 2020 |
| Project Status: | 100% Complete (Phase 1), 60% Complete (Phase 2) |
| Completion: | December 2022 |
| Budget: | \$22,969 (Phase 1), \$98,629 (Phase 2) |

Current Status: Phase 2 of the study continues with detailed reservoir water quality modeling performed by DiNatale Water Consultants. Modeling efforts using the Excel-based desktop model have been completed, and while these efforts were helpful in determining high-level transfer scenarios, the more detailed reservoir model will be utilized to help better represent the future conditions at Ragged Mountain Reservoir based upon the known characteristics of the proposed transfer system. Development of the more detailed reservoir model is underway, and staff has supplied the consultant with the data necessary to construct the model.

Other Significant Projects

23. 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 |
|-------------|--|--------------|
| 2020-08 | UWL-010 Leak | \$40,000 |
| 2021-08 | MCAWRRF Digester Manway Sealing | \$70,000 |
| 2021-09 | SLW Erosion Near SLW-022 | \$20,000 |
| 2022-01 | PCI-MH-10 Exploratory Excavation and Height Adjustment | \$30,000 |

- UWL-010 Leak: In 2020, during routine line maintenance, RWSA Maintenance Staff discovered that a blowoff valve on the Urban Waterline, UWL-010, was leaking into an adjacent creek. A blind flange was installed to stop the leakage at that time. Staff is coordinating the replacement of this defective valve with its On-Call Maintenance Contractor for the week of April 25, 2022. Right-of-way clearing to support this repair was completed on March 4, 2022.
- MCAWRRF Digester Manway Sealing: Staff has identified the immediate need to repair gas leaks in Digesters #1, #2 and #3 at the MCAWRRF. The gas leaks are a safety concern and are causing significant concrete degradation which has led to Digester #2 being taken out of service thereby reducing solids processing redundancy. Following external and internal inspections by our engineering consultants, it has been decided that installation of rubber seals in the manways and sample ports will mitigate gas leaks into the annular roof space and decrease further concrete degradation. Waco, Inc. was selected to perform the work under an Emergency Declaration by the Executive Director and seals were installed in Digester #2. Unfortunately, the Digester continued to leak gas once back in service so further investigative work is warranted to determine the source of the leaks and evaluate the structural integrity of the annular roof space. Waco has completed the work on Digester #1, #2, and #3.
- Erosion Near SLW-022: In Spring 2021, staff identified an area of erosion over RWSA's 20" Southern Loop Waterline (SLW), located near Forest View Road in Albemarle County. During subsequent site visits, it was determined that an adjacent creek/stormwater channel has silted in, causing water to become redirected over the RWSA Easement during heavy rain events. Staff is coordinating easement restoration efforts through its On-Call Maintenance Contract for the week of May 2nd and is also coordinating with Albemarle County Water Resources staff on potential collaborative efforts to address the issues on the RWSA easement and improve stormwater flow in the area.
- PCI-MH-10 Exploratory Excavation and Height Adjustment: Recently, while performing sewer evaluation of the Powell Creek Interceptor (PCI), RWSA staff identified that PCI-MH-10 appears to be buried just off the shoulder of PCI-MH-10. It is unknown how deep the lid of this MH is buried, but during sewer cleaning efforts, staff could hear the equipment in the manhole. RWSA

will be working with its On-Call Maintenance Contractor, Faulconer Construction, to hopefully find the manhole, and raise it to grade for future access and maintenance purposes. Work is scheduled to take place during the week of April 18, 2022.

24. Interceptor Sewer and Manhole Repair

| | |
|--|---|
| Design Engineer: | Frazier Engineering |
| Construction Contractor: | Insituform Technologies (Chesterfield, MO) |
| Construction Start: | November 2017 |
| Percent Complete: | 0% |
| Base Construction Contract + Change Orders to Date = Current Value: | \$701,011 |
| Expected Completion: | June 2022 |
| Budget: | \$1,088,330 (Urban) + \$880,000 (Crozet) = \$1,968,330 |

Current Status: Staff continues coordination on the lower Powell Creek Interceptor (PCI) and a portion of the Woodbrook Interceptor (WBI), as these are the next high-priority areas to be addressed based upon the latest CCTV footage. Notice to Proceed for the new contract with Insituform was issued on April 8th, and the first Work Authorization has been signed, which includes pipeline rehabilitation along PCI and WBI. Staff is also finalizing WA #2, which will include manhole rehabilitation along these two interceptors.

25. Security Enhancements

| | |
|---|---|
| Design Engineer: | N/A |
| Construction Contractor: | Security 101 (Richmond, VA) |
| Construction Start: | March 2020 |
| Percent Complete: | 99% (WA 2 & 3), 80% (WA 4), 0% (WA #5) |
| Based Construction Contract + Change Orders to Date = Current Value: | \$718,428.00 (WA1) + \$91,130.32 (WA2) + \$128,166.69 (WA3) + \$189,698.95 (WA4) + \$76,920.11 = \$1,204,344.07 (total) |
| Completion: | October 2022 (WA #5) |
| Budget: | \$2,810,000 |

Current Status: The only task that remains under WA #2 is some door and lock hardware improvements, which will enhance the functionality of the card access system. Card access installation at the Crozet and Scottsville WTP exterior doors under WA #3 is substantially complete. Finally, WA #4 includes security conduit at the South Rivanna and Observatory WTPs that was not included in the Improvements Project. This work began on November 2, 2021, with the majority of the work at South Rivanna WTP now complete. Security 101's subcontractor has also completed most work at Observatory, aside from the Pretreatment Building, which is also currently undergoing heavy renovations. The subcontractor will return as these buildings become more available for the work. Staff also recently executed WA #5, which authorizes card access installation at Glenmore Water Resource Recovery Facility (GWRRF), Scottsville Water Resource Recovery Facility (SVWRRF), and Red Hill Water Treatment Plant (RHWTP).

History

Under Construction

1. South Rivanna and Observatory Water Treatment Plant Renovations

An informational meeting with prospective contractors was held on September 26, 2019 to maximize interest in the project. A project kickoff meeting with staff was held on November 14, 2018 and 30% design documents were provided in February. A Value Engineering Workshop took place the week of April 8, 2019, and a memo summarizing the results has been completed. Agreed upon results were incorporated into the project. The project was advertised, and bids were received. English Construction was awarded the contract and a Notice to Proceed was issued on May 18, 2020. Coordination with UVA and Dominion on a new electrical easement at the plant has been completed and documents are being finalized.

Observatory: This project will upgrade the plant from 7.7 to 10 MGD capacity. Costs to upgrade the plant to 12 MGD were determined to be too high at this time. Much of the Observatory Water Treatment Plant is original to the 1953 construction. A Condition Assessment Report was completed by SEH in October of 2013. The approved Capital Improvement Plan project was based on the findings from this report. The flocculator systems were replaced and upgraded as part of the Drinking Water Activated Carbon and WTP Improvements project (GAC). Four additional GAC contactors will be included in the design.

South Rivanna: The work herein includes expansion of the coagulant storage facilities; installation of additional filters to meet firm capacity needs; the addition of a second variable frequency drive at the Raw Water Pump Station; the relocation for the electrical gear from a sub terrain location at the Sludge Pumping Station; a new building on site for additional office, lab, control room and storage space; improvements to storm sewers to accept allowable WTP discharges; of new metal building to cover the existing liquid lime feed piping and tanks. The scope of this project will not increase the 12 MGD plant treatment capacity.

2. Crozet Flow Equalization Tank

A 2016 update to the 2006 model was completed which evaluated the I&I reduction goals previously established and future capital project needs. Based on the results of that study, it was determined that the Crozet Interceptor system and the existing Crozet Pump Stations (1 through 4) have adequate capacity to handle the 2015 peak wet weather flow from the Crozet Service Area during a two-year storm. However, as projected growth in the service area occurs, peak wet weather flows in the area under the storm conditions established in the updated model will begin to exceed the firm capacities of the pump stations by 2025. Additional I&I reductions in order to reduce flows enough to not exceed the pump station firm capacities are not feasible and as a result, the construction of a flow equalization tank was identified as the best method to alleviate wet weather capacity issues.

While the study indicates that capacity should not be an issue until 2025, a flow equalization tank would also provide a significant benefit to the maintenance of the Crozet Pumping Station system which currently lacks system storage necessary to allow adequate time to perform repairs on the pumps and the associated force mains while the system is down.

Greeley and Hansen completed a siting study to determine the location for the flow equalization tank based on the results of the comprehensive model update. The results of the siting study were reviewed

with ACSA and a final tank location was determined.

A work authorization with Schnabel Engineering was finalized and a Project Kick-off Meeting was held on July 12, 2018. The construction bids were received on July 16, 2020. Anderson Construction of Lynchburg, VA was awarded the construction contract. Notice to Proceed on this project was given on October 9, 2020 and now construction is in progress.

3. MC Aluminum Slide Gate Replacements

Several large aluminum slide gates are located at the influent side of the Moores Creek Pump Station. These gates allow staff to stop or divert flow to perform maintenance activities. After repeated attempts to repair the deteriorated gates, it is now necessary to replace the gates and modify the gate arrangement. There are also several deteriorated gates at the Ultraviolet disinfection facility that leak water, causing a reduced capacity of the facility. Replacement of these gates will restore the process to full capacity. Work also includes replacement of the cast iron gates in the holding pond pump station and new actuators on the headworks gates. A Notice to Proceed for these efforts was provided on October 6, 2020. The work specific to the Moores Creek Pump Station will be bid under a separate project due to the extensive bypass pumping.

4. MC Exterior Lighting Improvements

The lighting at the 80-acre MCAWRRF consists of over 300 fixtures installed over the entire life of the facilities presence at Moores Creek. In 2019, Albemarle County investigated the lighting plan at the facility and issued a Zoning Notice of Violation.

RWSA and Albemarle County staff have been working together to best address the issue. A photometric plan of existing lighting was submitted to the county for review. RWSA has submitted a minor site plan amendment and Architectural Review Board submission that will include a large-scale replacement of non-compliant fixtures as well as address industrial lighting standards for the entire facility. The submission was approved by the County and design is underway.

The design has been completed by Hazen and Sawyer and the project was awarded to Pyramid Electrical Contractors, LLC. Notice to Proceed was provided on April 13, 2021.

5. MC Clarifier and Lime Silo Demolition

The two in-plant clarifiers were constructed in the late 1950's and were taken out of service as a result of the Odor Control Project at the plant. Due to the age of the tanks, various components have significantly deteriorated over time and no additional uses for these tanks have been identified. In addition, due to their out-of-service status, they remain empty and a safety concern for plant staff and visitors. There is also an abandoned lime silo currently located adjacent to the Solids Handling Building. Lime was previously used with the old plate and frame presses before centrifuges were installed for sludge dewatering purposes. This project will include the complete demolition of the in-plant clarifiers by removing all existing components, backfilling the area, and returning the area to open space and removing the lime silo from the plant and properly disposing of it. The project was advertised, and bids are due on July 1, 2021. A Notice of Award was issued on August 6, 2021 and a Notice to Proceed was issued on September 28, 2021.

6. Glenmore WRRF Influent Pump and VFD Addition

The 0.381-mgd water resource recovery facility, located within the Glenmore subdivision, is operated by RWSA. The facility includes an influent pumping station located immediately adjacent to the treatment facility. The Glenmore WRRF is predicted to see additional dry and wet weather flows as construction within the service area continues. Future wet weather flows will require higher influent pumping capacity and an additional pump and electrical variable frequency drive will be required to maintain firm capacity. After discussions with the Operations and Maintenance departments, installation of a new exhaust fan in the influent pump station will also be included. A work authorization for this project has been finalized and design is underway. The project was advertised, and bids are due on July 8, 2021. A Notice of Award was issued on August 6, 2021.

7. Airport Road Water Pump Station and Piping

The Rt. 29 Pump Station and Pipeline master plan was developed in 2007 and originally envisioned a multi-faceted project that reliably connected the North and South Rivanna pressure bands, reduced excessive operating pressures, and developed a new Airport pressure zone to serve the highest elevations near the Airport and Hollymead Town Center. The master plan update was completed in June of 2018 to reflect the changes in the system and demands since 2007. This project, along with the South Rivanna River Crossing and North Rivanna Transmission Main project, will provide a reliable and redundant finished water supply to the North Rivanna area. The proposed pump station will be able to serve system demands at both the current high pressure and future low-pressure conditions. These facilities will also lead to future phase implementation which will include a storage tank and the creation of the Airport water pressure zone. The North Rivanna Transmission Main improvements included under a separate CIP project have been added to this project to allow connection of the pump station to the distribution system.

Bids were opened on October 7, 2021 and this work was awarded at the October 2021 Board of Directors meeting. The contract was signed, and the pre-construction conference was held on December 9, 2021.

8. MC 5 kV Electrical System Upgrades

After discussions through the Moores Creek Facilities Master Plan, it was identified that several areas of the MCAWRRF, including the Blower Building, Sludge Pumping Building, Grit Removal Building, Moores Creek Pumping Station, and the Administration Building are all still connected to the original 5kV switchgear in the Blower Building. This equipment, including the associated cabling, switchgear, transformers, and motor control centers (MCCs), has a useful life expectancy of 20-30 years. Most of this equipment was installed around 1980. With the equipment having well exceeded its useful life expectancy at this point, safety is a concern given the large electric loads that the cabling and other equipment are handling on a day-to-day basis. Failure of the existing 5kV infrastructure could also result in temporary outages of certain treatment processes, and repairs could take weeks to months given the lead times associated with equipment of this age. A technical memo was provided in July 2020 by Hazen & Sawyer, which recommended that a CIP Project be added immediately to encompass replacement of the original 1980s-vintage 5kV cables, switchgear, transformers, and MCCs. A CIP Amendment Recommendation and Engineering Services Work Authorization was approved during the August 2020 Board of Directors Meeting. The Design Work Authorization was executed on October 6, 2020.

A Design Kickoff Meeting was held virtually on October 20, 2020. A site visit was attended on November 5, 2020 by Hazen & Sawyer staff, as well as RWSA Maintenance and Engineering Department staff. 50% Design Documents were provided in Spring 2021, with staff feedback

provided soon thereafter. A follow-up site visit by Hazen was performed in July 2021, in order to confirm the availability of spare conduits across the site and plan for the associated cable replacements. 95% Design Documents were provided by Hazen in September 2021, and staff returned comments in October 2021. Field work was conducted in Fall 2021 to evaluate the condition of conduits within the existing duct bank network, as well as verify pathways and connectivity within the network.

A Request for Bids (RFB) was issued on December 22, 2021, and bids were submitted on February 3, 2022. A Construction Contract Award for Pyramid Electrical Contractors was approved by the RWSA Board of Directors on February 22, 2022, and a Notice of Award (NOA) was provided to Pyramid on March 4, 2022.

9. Scottsville WTP Lagoon Liners Replacement

The Scottsville Water Treatment Plant (WTP) has two lined lagoons that receive filter backwash water, filter-to-waste water, and flow from the sedimentation basin sludge collectors. The lagoons are regulated under the Virginia DEQ VPDES permit program. The earthen lagoons are original to the plant and were lined at the request of DEQ in 2007 to prevent water infiltration out of the lagoons.

Recently, the lagoon liners have shown signs of degradation from ultraviolet sunlight. As such, a liner replacement project was added to the FY 22-26 CIP to begin in FY23 and be completed in FY24. Unfortunately, in early June '21, the liner in one of the lagoons failed during a high flow event. DEQ has been notified and the lagoon taken out of service, leaving the plant with only one remaining lagoon. In order to advance replacement of the liners, bid documents were developed, a Request for Bids was issued on January 4, 2022, and bids were received on February 1, 2022. A Notice of Award was provided to Haren Construction on March 4, 2022.

Design and Bidding

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

A Work Authorization was executed in December 2018 with Michael Baker International for the raw water line routing study, preliminary design, plat creation and the easement acquisition process for this portion of the project. Raw water is transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant (WTP) by way of two 18-inch cast iron pipelines, which have been in service for more than 110 and 70 years, respectively. The increased frequency of emergency repairs and expanded maintenance requirements are one impetus for replacing these pipelines. The proposed water line will be able to reliably transfer water to the expanded Observatory plant. The new pipeline will be constructed of 36-inch ductile iron and will be approximately 2.6 miles feet in length. The segment of the project immediately east of the RMR will constitute a portion of the proposed South Rivanna Reservoir to RMR raw water main project as part of the approved 50-year Community Water Supply Plan.

The RMR to Observatory WTP raw water pump station is planned to replace the existing Stadium Road and Royal pump stations, which have exceeded their design lives or will require significant upgrades with the Observatory WTP expansion. The pump station will pump up to 10 million gallons per day (MGD) of raw water to the Observatory WTP. The new pump station site selection and design are being conducted in coordination with the South Rivanna Reservoir to RMR pipeline in the interest of improved operational and cost efficiencies. An integrated pump station would also include the

capacity to transfer up to 16 MGD of raw water from RMR back to the SR WTP.

Both Design Work Authorizations received Board of Directors approval on July 27, 2021. A kickoff meeting was held on September 17, 2021, and a meeting to begin establishing boundary conditions for the RMR Pump Station was held on October 25, 2021. An internal RMR Pump Station Operations workshop was held on February 23, 2022 to set the boundary conditions for the facility, and this information was provided promptly to the Design Consultant to allow design efforts to continue progressing.

11. South Rivanna Reservoir to Ragged Mtn. Reservoir Raw Water Line -Birdwood to Old Garth

This project is the continuation of the SRR to RMR 36" raw water pipeline built on the Birdwood Golf Course. Design efforts were authorized in June 2021 with construction anticipated in Summer 2022.

12. Beaver Creek Dam and Pump Station Improvements

Dam: A spillway upgrade alternative for the dam has been selected and was presented in a public meeting on October 6, 2021. A new raw water pump station site and pipe access route were selected and approved by the Board in August 2021. RWSA operates the Beaver Creek Dam and reservoir as the sole raw water supply for the Crozet Area. In 2011, an analysis of the Dam Breach inundation areas and changes to Virginia Department of Conservation and Recreation (DCR) *Impounding Structures Regulations* prompted a change in hazard classification of the dam from Significant to High Hazard. This change in hazard classification requires that the capacity of the spillway be increased. This CIP project includes investigation, preliminary design, public outreach, permitting, easement acquisition, final design, and construction of the anticipated modifications. Work for this project will be coordinated with the new relocated raw water pump station and intake and a reservoir oxygenation system project.

Schnabel Engineering developed three alternatives for upgrading the capacity of the Beaver Creek Dam Spillway in 2012. Following the adoption of a new Probable Maximum Precipitation (PMP) Study on December 9, 2015 and the release of DCR guidelines for implementing the PMP study in March of 2016, RWSA determined it would proceed with an updated alternatives analysis and Preliminary Engineering Report for upgrading the dam spillway. Following the completion of an updated alternatives analysis by Schnabel Engineering, staff met with members of Albemarle County and ACSA staff to discuss the preferred alternative. It was determined that staff would proceed with design of a labyrinth spillway and chute through the existing dam with a bridge to allow Browns Gap Turnpike to cross over the new spillway.

In 2020, staff received grant funding for a planning and environmental study from the Natural Resources Conservation Service (NRCS). The project kicked off in August 2020 and is expected to be completed in July 2022. Following completion of the study and acceptance of the Plan-Environmental document by NRCS, staff will pursue additional grant funding through NRCS that, if available, could cover up to 65% of final design and construction costs.

Pump Station: The Drinking Water Infrastructure Plan for the Crozet water service area, developed by Hazen and Sawyer, recommends installation of a new Raw Water Pump Station and Intake at the Beaver Creek Dam in order to meet new minimum instream flow requirements and provide adequate raw water pumping capacity to serve the growing Crozet community for the next 50 years. The pump station will be moved out of its existing location at the toe of the dam to a new location, to be

determined during design. The new intake structure will include enhanced controls to allow for access to the best quality water at any given time.

13. South Rivanna River Crossing

RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 29 Solutions projects, including approximately 10,000 LF of 24-inch water main along Rt. 29 and 600 LF of 24-inch water main along the new Berkmar Drive Extension, behind the Kohl's department store. To complete the connection between the SRWTP and the new 24-inch water main in Rt. 29, there is a need to construct a new river crossing at the South Fork Rivanna River. Acquisition of right-of-way will be required at the river crossing.

14. Central Water Line

Route alignment determination, hydraulic modeling, and preliminary design were underway in 2017. Due to the complicated nature of our finished water systems, it was decided at the August 2018 Board meeting that a more comprehensive approach was warranted, and we should complete the Finished Water Master Plan prior to moving forward with final design and construction of the Central Water Line (formerly referred to as the Avon to Pantops Water Main). The focus of this project was on the southern half of the urban area water system which is currently served predominantly by the Avon Street and Pantops water storage tanks. The Avon Street tank is hydraulically well connected to the Observatory Water Treatment Plant, while the Pantops tank is well connected to the South Rivanna Water Treatment Plant. The hydraulic connectivity between the two tanks, however, is less than desired, creating operational challenges and reduced system flexibility. In 1987, the City and ACSA developed the Southern Loop Agreement which laid out two key phases (with the first being built at the time). The 1987 Agreement and planning efforts were a starting point for this current project. An engineering contract has been negotiated and was approved by the Board of Directors in July 2017. Recent efforts and modeling for the Urban Finished Water Infrastructure Master Plan have determined that a central water line corridor through the City is the best option to hydraulically connect the Observatory Water Treatment Plant to the Pantops area, with connections to City water lines to support the water distribution system in the City and County.

15. Upper Schenks Branch Interceptor, Phase II

The Schenks Branch Sanitary Sewer interceptor is a pipeline operated by RWSA that serves the City of Charlottesville. The 21-inch sewer line was originally constructed by the City in the 1950s. Evaluations from the flow metering and modeling from the Comprehensive Sanitary Sewer Interceptor Study, and negotiations with the ACSA and City, resulted in an inflow and infiltration reduction plan from which it was concluded that increased capacity of the Schenks Branch Interceptor was needed for wet weather peak flow. Due to several road construction projects and the construction of the Meadow Creek Interceptor project along the sewer alignment, Schenks Branch was to be constructed in multiple phases. The completed sections, collectively known as the Lower Schenks Branch Interceptor, include the Tie-in to Meadow Creek, the section along McIntire Road Ext, and the section through the Route 250 Interchange.

The remaining sections, which are considered the Upper Schenks Branch Interceptor, were split into 2 phases. The first phase has been completed and is located within City-owned Schenks Greenway adjacent to McIntire Road, and the second phase is being evaluated to determine whether it will be installed in an easement on County property (baseball field and County Office Building) adjacent to

McIntire Road or in McIntire Road itself.

16. Red Hill Water Treatment Plant – Upgrades

The Red Hill WTP was constructed in a joint effort of ACSA and RWSA in 2009 and consists of a well, a pneumatic tank and pump house that provides treated water to the Red Hill Elementary School and adjoining neighborhood. The project was constructed in response to groundwater contamination as a result of a nearby leak of underground fuel storage tanks. Originally the facility was operated primarily as a well head and pump house. More recently the facility has operated more as a water treatment facility with a well as source water. As such, there have been several chemical process additions, automation, online monitoring and an increase in operator wet chemistry testing. The current building is well beyond its physical capacity and this project will serve to expand the building and improve the configuration of the process and laboratory needs of the WTP.

17. Emmet Street Water Line Betterment

The Urban Finished Water Master Plan identified several necessary upgrades to the urban water distribution system to improve system performance and reliability. One of the identified improvements is an upgrade and extension of the existing RWSA water main along the Emmet Street corridor from the University of Virginia to Hydraulic Road. This project will utilize planned road, streetscape, utility, and development projects along the Emmet Street corridor to complete portions of the Emmet Street water main improvements as betterment, with the goal of completing the water main improvements by 2030. The project scope includes planning and coordination between RWSA, UVA, the City of Charlottesville, and VDOT, design services for the betterment and “gap” sections of water line, construction funding, and construction management services. Current identified projects with betterment opportunities include: the UVA Ivy Corridor Redevelopment, UVA Contemplative Commons, the City of Charlottesville Emmet Streetscape Projects (multiple phases), and VDOT intersection improvements at Barracks Road, the US-250/Emmet Street Interchange, and Hydraulic Road.

Planning and Studies

16. South Rivanna Reservoir to Ragged Mtn. Reservoir Water Line Right-of-Way

The approved 50-year Community Water Supply Plan includes the construction of a raw water line from the South Rivanna Reservoir to the Ragged Mountain Reservoir. This water line will replace the existing Upper Sugar Hollow Pipeline and increase raw water transfer capacity in the Urban Water System. The preliminary route for the water line followed the proposed Route 29 Charlottesville Bypass; however, the Bypass project was suspended by VDOT in 2014, requiring a more detailed routing study for the future water line. This project includes a routing study, preliminary design, and preparation of easement documents, as well as acquisition of water line easements along the approved route.

Baker has completed the routing study. Preliminary design, plat creation and the acquisition of easements are underway. Property owners were contacted to request permission to access properties for topographical surveying. A community information meeting was held in June 2018.

17. Urban Finished Water Infrastructure Master Plan

As identified in the 2017 Strategic Plan, the Authority has a goal to plan, deliver and maintain dependable infrastructure in a financially responsible manner. Staff has identified asset master planning as a priority strategy to improve overall system development. Many previously identified projects in the urban finished water treatment and distribution system are in preliminary engineering, design, or construction. As such, staff have identified a need to develop a current and ongoing finished water master plan.

18. Asset Management Plan

Asset management is the practice of managing our infrastructure to minimize the total cost of owning and operating these assets while providing desired service levels. In doing so, it is used to make sure planned maintenance activities take place and that capital assets are replaced, repaired, or upgraded at the right time, while ensuring that the money necessary to perform those activities is available. RWSA has some components of an asset management program in place (i.e. GIS, work order system), but has identified the need to further develop the program as part of our Strategic Planning process. In order to continue to build the program, a consultant has been procured to assist with a three-phase process that will include facilitation and development of an asset management strategic plan, development, and management of a pilot study where the results of the strategic plan will be applied to a specific class of assets, and assistance through a full implementation process. As part of this three-phase process, the consultant also assisted RWSA with the procurement of a new CMMS software package to facilitate the overall program. Cityworks was selected and implementation has begun.

19. MC Facilities Master Plan

The majority of the Moores Creek Water Resource Recovery Facility was constructed in the early 1980's. At the time, the plant layout was developed with space held open for future process expansion. With the Enhanced Nutrient Removal (ENR) project in 2009, the operation and layout of the plant was fundamentally altered, as needed to meet the new regulation. The project did anticipate the need for future expansion and some of the processes have readily available space. However, a full expansion plan was not developed at the time. As identified in the Strategic Plan, the Authority has a goal to plan, deliver and maintain dependable infrastructure in a financially responsible manner. Staff has identified asset master planning as a priority strategy to improve overall system development. As such, this project will serve to evaluate and plan for future space and process needs to accommodate capacity expansion and/or anticipated regulatory changes.

20. SRR to RMR Pipeline – Pretreatment Pilot Study

As part of the SRR to RMR Pipeline project, the impact of sending raw water from the SRR to RMR has been previously studied and a significant amount of pretreatment was initially identified as being needed to avoid reducing the quality of the raw water contained within the RMR. With the pipeline easement acquisition process well underway and additional information now available associated with the proposed timing of this overall project based on water demand projections, the intent of this project is to update the pretreatment needs anticipated.

The study is anticipated to be completed in 4 phases: 1. Analysis and Correlation of Existing Water Quality and Seasonal Weather Data 2. Enhanced Water Quality Sampling 3. Pretreatment Piloting 4. Level Setting for the Final Pretreatment Solution. Phase 1 commenced in January 2021 and was completed in July 2021. Phase 2 began in June 2021. The Excel Desktop Modeling portion of the analysis was completed in February 2022.

Other Significant Projects

21. Urgent and Emergency Repairs

- **South Rivanna Dam Apron and Riverbank Repairs**

Intense rainfall between May 30-31, 2018 resulted in extensive flooding throughout Charlottesville and parts of Albemarle County, with flows over the South Fork Rivanna Dam reaching more than 7 feet over the spillway crest at its peak. Staff has inspected the dam and abutments to determine the extent of damage resulting from the extreme flooding. Although there is no discernible damage to the dam itself, staff found erosion damage to the north downstream riverbank and substantial displacement of large stone downstream of the dam to form a rock dam and pool below the north apron. Additionally, some damage to concrete structures on both aprons was noted, including possible creation of voids beneath the concrete and loss of concrete joint filler. Repairs to the riverbank and removal of the rock dam were completed June 3-7, 2019 under RWSA's on-call construction contract.

- **Urban Water Line Valve and Blow-off Repair**

During its routine inspections of the Water System, the Maintenance Department discovered a blowoff (drain) valve along the Urban Waterline (UWL-017) that had significant leakage. In addition, during one of the numerous heavy rain events received in 2018, the water in the creek adjacent to the drain line rose, eroding the area around the drain line and causing the headwall to become disconnected from the end of the pipe. Staff will be coordinating internally to confirm the overall scope of the project, including whether the drain line will need to be further reinforced or restrained.

22. Interceptor Sewer and Manhole Repair

Results from sewer flow monitoring and modeling under the Comprehensive Sanitary Sewer Study provided awareness to specific inflow and infiltration (I&I) concerns in the collection system and resulted in strengthened commitments from the City, ACSA and RWSA to continue professional engineering services to aid in the rehabilitation and repair of the sewer collection system. Engineering services will be used for sewer infrastructure condition assessments and the development of a sewer rehabilitation bid package for the procurement of a contractor to perform the recommended rehabilitation work.

Lining work and manhole rehabilitation on the Upper Morey Creek Interceptor began in Fall 2019 and was completed in Fall 2020. A critical section of upper Morey Creek Interceptor under Rt. 250 was lined on August 28, 2020. 65' of new ductile iron sewer to replace a sagging section of vitrified clay piping was installed in May 2021. Tri-State Utilities completed over 3,000 LF of Sewer Cleaning and CCTV under RFQ No. 1105 in October 2021 on high-priority portions of the Powell Creek and Woodbrook Interceptors.

A bid package was developed to address the highest priority known defects on the Powell Creek, Woodbrook, and Crozet Interceptors. A Request for Bids (RFB) was issued on December 22, 2021, and bids were submitted on February 3, 2022. A Construction Contract Award for Insituform Technologies was approved by the RWSA Board of Directors on February 22, 2022, and a Notice of Award (NOA) was provided to Pyramid on March 4, 2022.

23. Security Enhancements

As required by the Federal Bioterrorism Act of 2002 and the American Water Infrastructure Act of 2018, water utilities must conduct Vulnerability Assessments and have Emergency Response Plans. RWSA recently completed an updated Risk Assessment of its water system in collaboration with the Albemarle County Service Authority (ACSA), City of Charlottesville (City), and University of Virginia (UVA). A number of security improvements that could be applied to both the water and wastewater systems were identified. The purpose of this project will be to install security improvements at RWSA facilities including additional security gate and fencing components, vehicle bollards, facility signage, camera system enhancements, additional security lighting, intrusion detection systems, door and window hardening, installation of industrial strength locks, communication technology and cable hardening, and an enhanced access control program.

RWSA Engineering staff held a meeting with Operations staff to discuss overall project needs and priorities in October 2018. Meetings with ACSA and City staff were held in Fall/Winter 2018-2019 to discuss how access control and intrusion detection systems have been implemented into to the day-to-day operations of the two utilities. A Request for Proposal (RFP) for an Implementer to facilitate selection of an access control system, confirmation of design requirements based upon RWSA's facilities and project goals, and installation of the selected system was issued on June 6, 2019. RWSA conducted a Pre-Proposal Meeting on June 14, 2019, and proposals were opened on June 27, 2019. Interviews were conducted on July 15-16, 2019, and a Contract Award Recommendation was approved by the Board on July 23, 2019. Access Control System Installation at MCAWRRF began in March 2020. Access Control System Installation was completed in the Administration and Engineering Buildings by the week of November 30, 2020, completing installation of the physical access control system across the MCAWRRF site. Training for staff was completed on November 10, 2020. RWSA authorized improvements to locks and doors across the MCAWRRF site on May 4, 2021, in order to improve the condition of the hardware and subsequently, operations of the access control system. In addition, installation of the card access system on all exterior doors at the Scottsville and Crozet Water Treatment Plants (SVWTP and CZWTP, respectively) was authorized shortly thereafter. RWSA also authorized installation of security conduits not already included at SRWTP and OBSWTP under the Improvements Project in August 2021.

Access Control on exterior doors at the CZWTP and SVWTP was substantially completed in November 2021.

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 MARCH 2022

DATE: APRIL 26, 2022

The monthly and average daily Urban water system usages by the City and the ACSA for March 2022 were as follows:

| | <i>Month</i> | <i>Daily Average</i> | |
|--------------------|--------------------|----------------------|--------------|
| City Usage (gal) | 132,231,644 | 4,265,537 | 49.9% |
| ACSA Usage (gal) | 132,553,577 | 4,275,922 | 50.1% |
| Total (gal) | 264,785,221 | 8,541,459 | |

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 April 2021), and that usage relative to the maximum allocation for each party (6.71 MGD for the City and 11.99 MGD for ACSA).

Note: Staff has detected a read issue with Meter Site 15 – Ivy Road at Colonnade Drive. It is likely that the meter and/or register will require replacement. Staff is assessing the issue and will report a flow estimate for this site using available data until the issue is resolved.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation

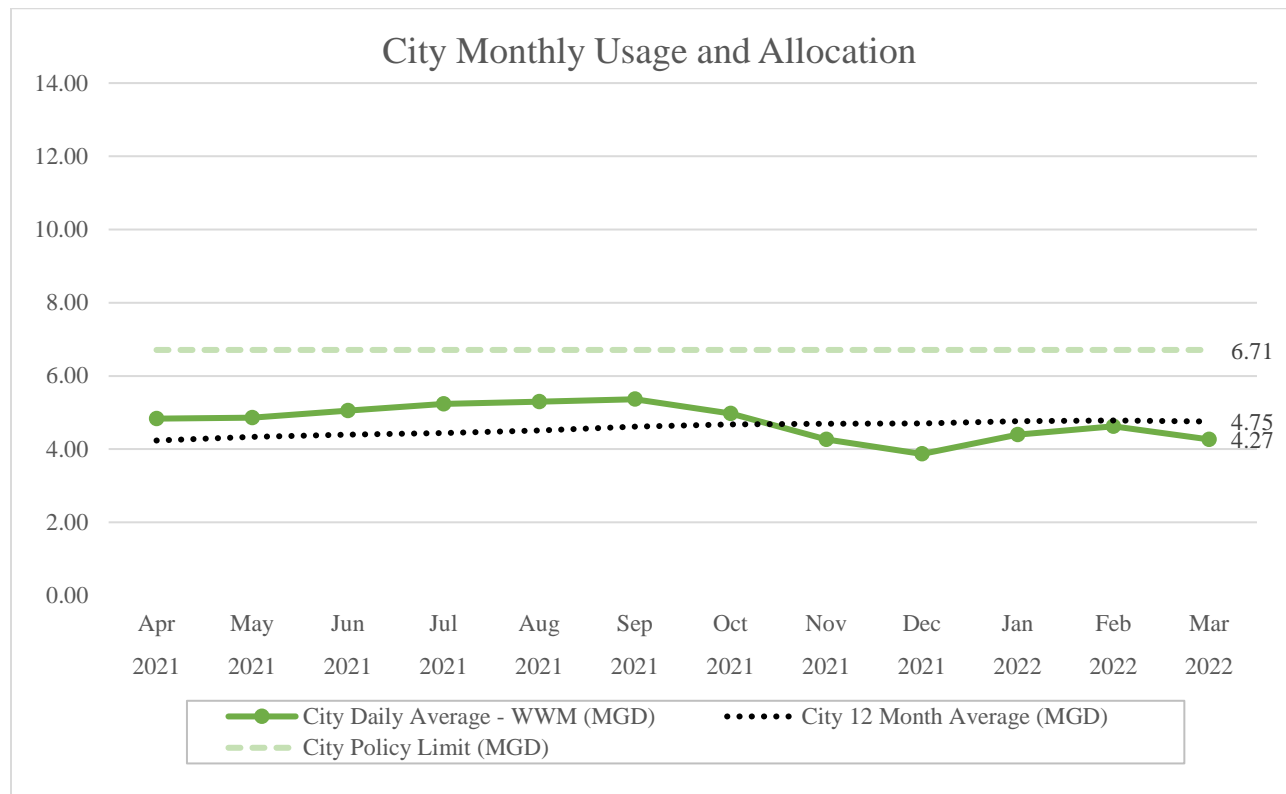
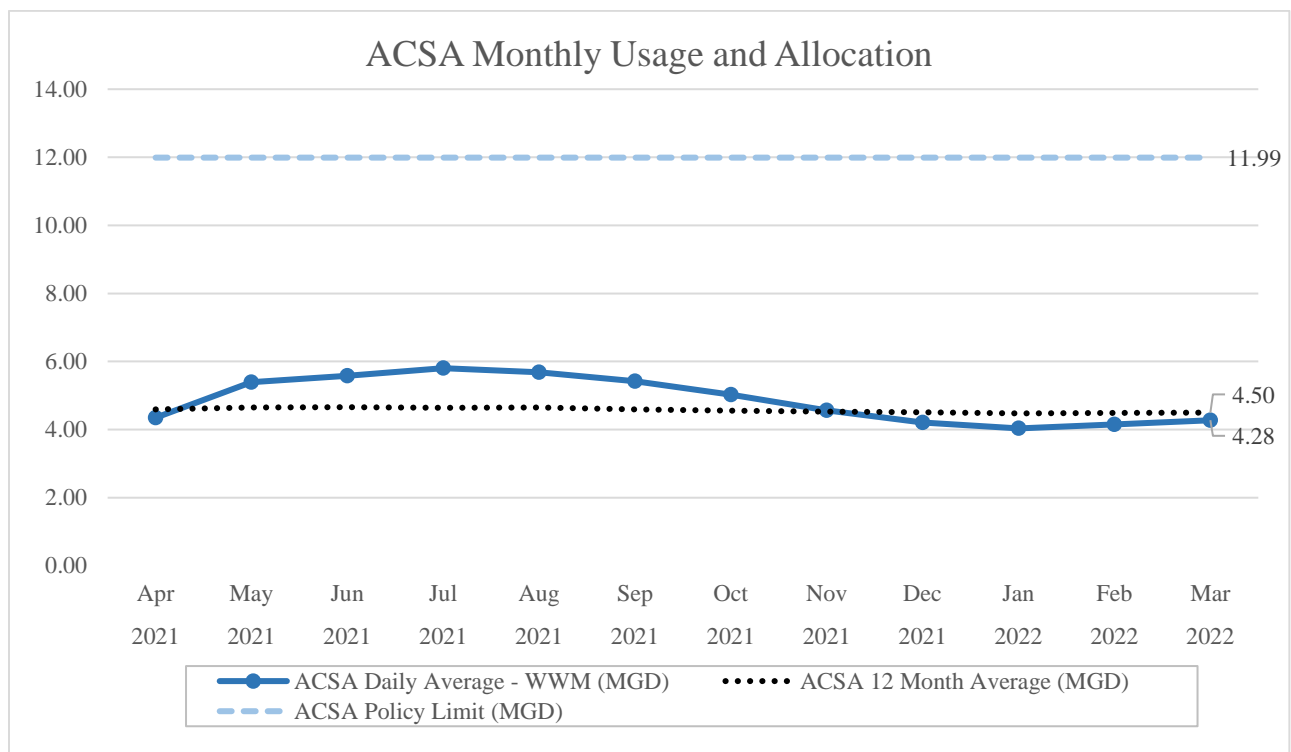


Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation





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

FROM: ANDREA BOWLES, WATER RESOURCES MANAGER

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: DROUGHT MONITORING REPORT

DATE: APRIL 26, 2022

Drinking Water Supply and Drought Monitoring, as of April 14, 2022:

- A. U.S. Drought Monitoring Report:
 - No drought phases have been initiated. Albemarle County is noted to be abnormally dry.
- B. VDEQ Drought Status Report:
 - Our region is at a “Watch” level for low precipitation and groundwater.
- C. Urban Reservoirs Status (Sugar Hollow, South Rivanna, Ragged Mountain):
 - 100% full.

Precipitation

| Charlottesville Precipitation | | | | |
|-------------------------------|------------------|----------------|--------------|-----------------|
| Year | Month | Observed (in.) | Normal (in.) | Departure (in.) |
| 2021 | Total: Jan - Dec | 33.82 | 41.61 | -7.79 |
| | | | | |
| 2022 | January | 3.79 | 2.96 | 0.83 |
| | February | 1.48 | 2.35 | -0.87 |
| | March | 2.64 | 3.54 | -0.9 |
| | Total: Jan - Mar | 7.91 | 8.85 | -0.94 |

Source: National Weather Service, National Climatic Data Center.



MEMORANDUM

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

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: APPROVAL OF THE “NORTHERN AREA DRINKING WATER
PROJECTS AGREEMENT”**

DATE: APRIL 26, 2022

This memo is to request approval of the attached Agreement between the City of Charlottesville (City), Albemarle County Service Authority (ACSA) and the Rivanna Water & Sewer Authority (RWSA). This Agreement will establish cost allocations for four new drinking water Capital Improvement Plan (CIP) projects, and all future water CIP projects to be constructed north of the South Fork Rivanna River by the RWSA. The Agreement also confirms the cost allocation for the North Rivanna Water Treatment Plant Decommissioning Project previously allocated between the City and ACSA pursuant to paragraph 4 of the “South Rivanna Water Treatment Plant Agreement” of 2003. The Director of the City Department of Utilities, ACSA Executive Director, and I have collaborated and coordinated with assistance from our attorneys since early 2021 to establish this cost allocation Agreement.

Background:

An allocation of all costs for site acquisition, design and construction has been agreed upon for four drinking water infrastructure projects, as well as all future drinking water infrastructure projects, planned in the northern area of the County, as follows:

1. The Airport Road Water Pump Station and Piping Project, which will provide redundancy and reliability to the portion of the Urban Area Water System located north of Towncenter Drive within the County. RWSA shall allocate 100% of the debt service charges for this project to the ACSA.
2. The South Rivanna River Crossing Project, which will provide a water main under the South Fork Rivanna River as a second redundant pipe to connect the South Rivanna Water Treatment Plant to the portions of the Urban Area Water System located north of the South Fork Rivanna River in the northern area of the County. RWSA shall allocate 100% of the debt service charges for this project to the ACSA.
3. The North Rivanna River Crossing Project, which will provide a water main under the North Fork Rivanna River as a second redundant pipe to connect the portions of the Urban Area Water System located north and south of the North Fork Rivanna River. RWSA shall allocate 100% of the debt service charges for this project to the ACSA.

4. The Water Storage Tank Project for the Airport Road Water Pump Station, which will provide an estimated one million gallons of finished water storage. This tank will be constructed when demand conditions require water storage to support the Airport area and the overall Urban Area Water System, including the City of Charlottesville. RWSA shall allocate 10% the debt service charges for this project to the City, and 90% to the ACSA.

The Agreement also specifies that RWSA shall allocate 100% of the debt service charges for all future capacity and non-capacity drinking water facilities located north of the South Fork Rivanna River to the ACSA, and confirms that RWSA shall allocate 48% of the debt service charges to the City and 52% to ACSA for the North Rivanna Water Treatment Plant Decommissioning Project.

Board Action Requested:

Approve the “Northern Area Drinking Water Projects Agreement”, to become effective upon obtaining signatures from the City, ACSA, and the RWSA.

Attached: Northern Area Drinking Water Projects Agreement (2022)

Prepared by:
Valerie W. Long, Esq., VSB # 42968
Williams Mullen
321 E. Main Street,
Suite 400
Charlottesville, VA 22902

NORTHERN AREA DRINKING WATER PROJECTS AGREEMENT

THIS NORTHERN AREA DRINKING WATER PROJECTS AGREEMENT (this “Agreement”) is made as of _____, 2022, by and between the **CITY OF CHARLOTTESVILLE, VIRGINIA**, a municipal corporation (the “City”), the **ALBEMARLE COUNTY SERVICE AUTHORITY**, a public body politic and corporate (the “ACSA”), and the **RIVANNA WATER AND SEWER AUTHORITY**, a public body politic and corporate (the “RWSA”).

WITNESSETH:

- A. RWSA was formed in 1972 by a joint resolution of Albemarle County (the “County”) and the City for the purpose of acquiring, financing, constructing, and maintaining facilities to supply drinking water to both communities under terms set out in the “Four Party Agreement” dated June 12, 1973 among the City, the County, ACSA, and RWSA (the “Four Party Agreement”).
- B. RWSA owns and/or operates facilities for the supply of raw water and treatment of potable water pursuant to the terms of the Four Party Agreement and several supplementary agreements thereto.
- C. Paragraph 7.2 of the Four Party Agreement directed RWSA to establish an urban area which shall include all of the City and designated portions of the County, and further provided that the boundaries of the urban area may be changed from time to time (the “Urban Area”). RWSA owns and operates three water treatment plants that

serve the Urban Area, which are the Observatory Water Treatment Plant, the South Rivanna Water Treatment Plant, and the North Rivanna Water Treatment Plant (collectively, the “Urban Area Water System Plants”) (sometimes referred to as the “Urban Water System Plants”). RWSA operates three reservoirs that serve the Urban Area, which are the South Rivanna Reservoir, the Ragged Mountain Reservoir, and the Sugar Hollow Reservoir (collectively, the “Urban Area Reservoirs,” and, collectively with the Urban Area Water System Plants and all dams, pipelines, pumping stations, storage tanks, and other equipment, facilities, and appurtenances related to each, the “Urban Area Water System”).

- D. The Urban Area currently consists of all of the City and designated portions of the County that are served by public water that has been treated at one of the three Urban Area Water System Plants. Other areas within the County that are served by public water that is not treated at one of the Urban Area Water System Plants (such as areas in Crozet, Red Hill, and Scottsville, each of which is served by a water treatment plant owned and operated by RWSA) are not part of the Urban Area as that term is referred to in Section 7.2 of the Four Party Agreement, and as that term is used in this Agreement.
- E. Pursuant to Article IV of the Four Party Agreement, which provides that RWSA shall also undertake the provision of such additional facilities as may be agreed upon from time to time by the City, ACSA, and RWSA (collectively, the “Parties”), the Parties have agreed upon an allocation of costs for construction of four new drinking water infrastructure projects, all planned within the northern area of the County, which four projects are identified and described as follows:

1. The Airport Road Water Pump Station and Piping Project, which will provide redundancy and reliability to the portion of the Urban Area Water System located north of Towncenter Drive within the County (the “Airport Road Water Pump Station and Piping Project”).

2. The South Rivanna River Crossing Project, which will provide a water main under the South Fork Rivanna River as a second redundant pipe to connect the South Rivanna Water Treatment Plant to the portion of the Urban Area Water System located north of the South Fork Rivanna River in the northern area of the County (the “South Rivanna River Crossing Project”).

3. The North Rivanna River Crossing Project, which will provide a water main under the North Fork Rivanna River as a second redundant pipe to connect the portions of the Urban Area Water System located north and south of the North Fork Rivanna River (the “North Rivanna River Crossing Project”).

4. The Water Storage Tank Project for the Airport Road Water Pump Station, which tank will provide an estimated one million gallons of finished water storage, and will be constructed when demand conditions require water storage to support the Airport area and the overall Urban Area Water System, including the City of Charlottesville (the “Airport Road Water Storage Tank”).

F. The four facilities listed in paragraph E herein, along with all future capacity and non-capacity water facilities located north of the South Fork Rivanna River (except as expressly provided to the contrary herein), are collectively referred to as the “Northern Area Drinking Water Projects.”

G. The City and the ACSA have reached an agreement concerning the sharing of costs for design and construction of, and for the acquisition of property and/or easements necessary for the Northern Area Drinking Water Projects, on the terms and conditions contained herein.

NOW, THEREFORE, for and in consideration of the premises, and other good and valuable consideration, the receipt of all which is hereby expressly acknowledged, the City, ACSA and RWSA hereby agree as follows:

AGREEMENT

1. Pursuant to Article IV of the Four Party Agreement, the City and ACSA agree to and hereby direct RWSA, and RWSA hereby agrees, to proceed with the design and construction of, and the acquisition of property and/or easements for, the Northern Area Drinking Water Projects.
2. RWSA shall allocate the debt service charges for the Airport Road Water Pump Station and Piping Project as follows: 100% to ACSA.
3. RWSA shall allocate the debt service charges for the South Rivanna River Crossing Project as follows: 100% to ACSA.
4. RWSA shall allocate the debt service charges for the North Rivanna River Crossing Project as follows: 100% to ACSA.
5. RWSA shall allocate the debt service charges for the Airport Road Water Storage Tank Project as follows: 10% to the City, and 90% to ACSA.

6. Except as expressly provided in paragraph 7 herein, RWSA shall allocate the debt service charges for all future capacity and non-capacity water facilities located north of the South Fork Rivanna River as follows: 100% to ACSA.
7. The costs for a project known as the North Rivanna Water Treatment Plant Decommissioning, which will demolish and remove the existing North Rivanna Water Treatment Plant constructed in 1974, and transfer service requirements thereof to the two other water treatment plants comprising the Urban Area Water System Plants (the South Rivanna and Observatory Water Treatment Plants) (the “North Rivanna Water Treatment Plant Decommissioning Project”) have previously been allocated among the City and ACSA pursuant to paragraph 4 of that certain untitled Agreement between the parties dated December 1, 2003, commonly referred to as the “South Rivanna Water Treatment Plant Agreement of 2003” (the “2003 Agreement”), which 2003 Agreement provides in paragraph 4 thereof that as a non-capacity related project of the Urban Area Water System, that RWSA shall allocate 48% of the debt service charges of the project to the City, and 52% to ACSA. Although the North Rivanna Water Treatment Plant Decommissioning Project has not yet commenced as of the date of this Agreement, the provisions of paragraph 6 of this Agreement shall not apply to that project. Instead, the terms of paragraph 4 of the 2003 Agreement shall continue to apply to the cost allocations for the North Rivanna Water Treatment Plant Decommissioning Project, such that RWSA shall allocate 48% of the debt service charges to the project to the City, and 52% to ACSA.

8. In the event any one or more of the terms or provisions contained in this Agreement should be held invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions will not in any way be affected or impaired. Any invalid or unenforceable term or provision will be deemed to be void and of no force and effect only to the minimum extent necessary to cause such term or provision to become valid and enforceable, and the balance of this Agreement will be fully enforceable.
9. This Agreement shall be binding upon, inure to the benefit of, and be enforceable by the Parties and their respective successors and assigns.

IN WITNESS WHEREOF, the duly authorized officers of the City, the ACSA, and RWSA have executed this Agreement as of the date written above.

[SIGNATURE PAGES IMMEDIATELY FOLLOW]

*[SIGNATURE PAGE 1 of 3 OF
NORTHERN AREA WATER PROJECTS AGREEMENT]*

CITY OF CHARLOTTESVILLE, VIRGINIA

By: _____
Michael C. Rogers, Interim City Manager

COMMONWEALTH OF VIRGINIA
CITY OF CHARLOTTESVILLE, to wit:

The foregoing instrument was acknowledged by me this _____ day of _____,
2022, Michael C. Rogers, as Interim City Manager of the City of Charlottesville, Virginia.

Notary Public

Registration No.: _____

My Commission expires: _____

APPROVED AS TO FORM:

Lisa Robertson, City Attorney

[SIGNATURE PAGE 2 OF 3 OF
NORTHERN AREA WATER PROJECTS AGREEMENT]

ALBEMARLE COUNTY SERVICE AUTHORITY

By: _____
Gary B. O'Connell, Executive Director

COMMONWEALTH OF VIRGINIA
COUNTY OF ALBEMARLE, to wit:

The foregoing instrument was acknowledged by me this _____ day of _____,
2022, by Gary B. O'Connell as Executive Director of the Albemarle County Service
Authority.

Notary Public

Registration No.: _____

My Commission expires: _____

*[SIGNATURE PAGE 3 OF 3 OF
NORTHERN AREA WATER PROJECTS AGREEMENT]*

RIVANNA WATER AND SEWER AUTHORITY

By: _____
William I. Mawyer, Jr. P.E., Executive Director

COMMONWEALTH OF VIRGINIA
CITY OF CHARLOTTESVILLE, to wit:

The foregoing instrument was acknowledged by me this _____ day of _____,
2022, by William I. Mawyer, Jr. P.E. as Executive Director of the Rivanna Water and
Sewer Authority.

Notary Public

Registration No.: _____

My Commission expires: _____



MEMORANDUM

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

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

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: TRANSFER OF OWNERSHIP TO ALBEMARLE COUNTY
SERVICE AUTHORITY – UPPER MOREY CREEK
INTERCEPTOR**

DATE: APRIL 26, 2022

In 2019-2020, RWSA rehabilitated a significant portion of the Morey Creek Interceptor (MRI), known as the Upper Morey Creek Interceptor. This portion of MRI originates just North of the Birdwood Golf Course and contains approximately 5,800 LF of 12" Vitrified Clay Piping and 23 manholes. Upper MRI carries on average approximately 60,000 gallons per day of dry weather sanitary sewage, mostly from residential and small non-residential sewer connections. The nature and volume of the discharges into this sewer aligns better with sewers owned and operated by the Albemarle County Service Authority (ACSA), thus staff recommends that ownership of the Upper MRI be transferred to ACSA.

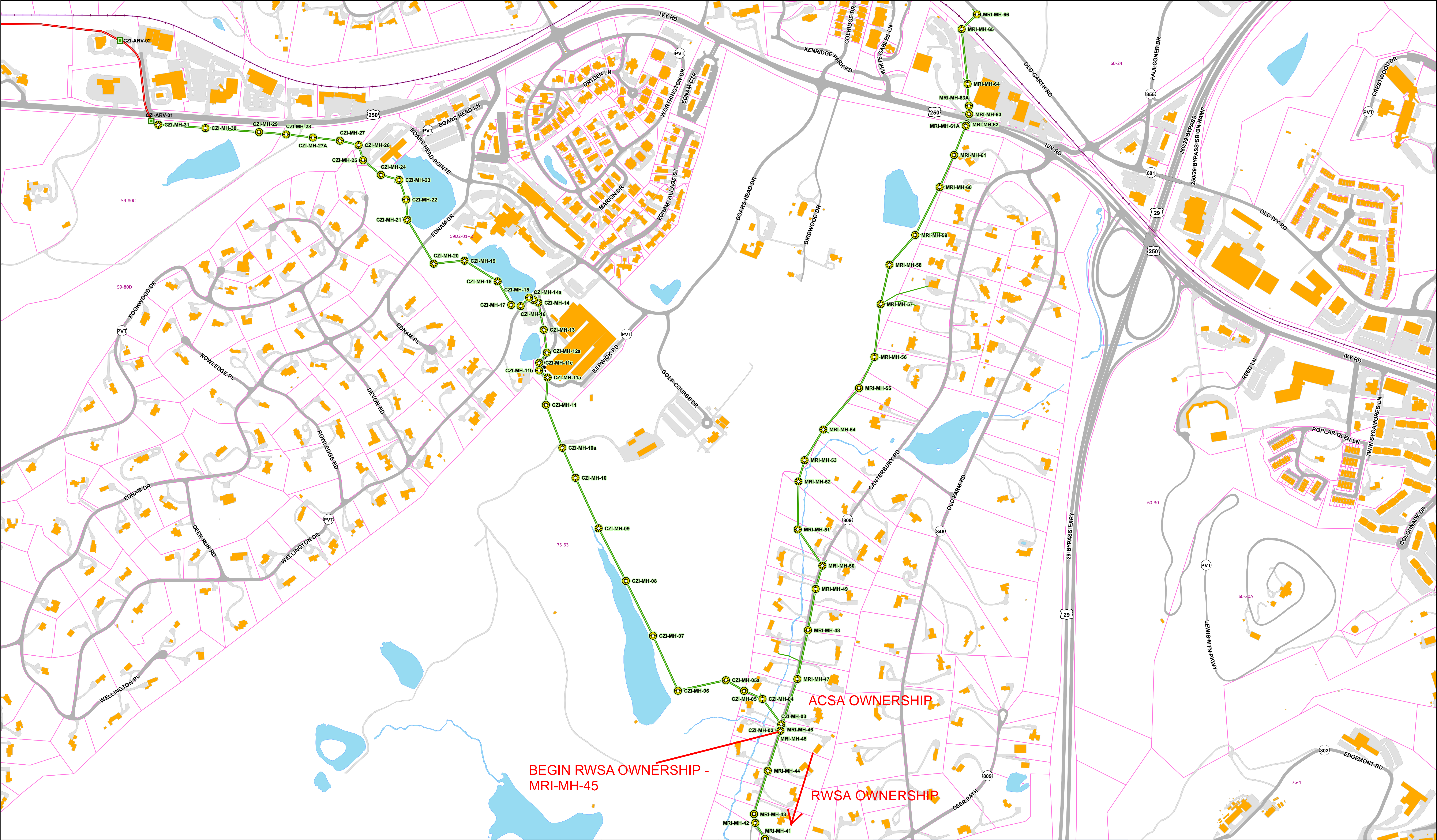
Background

The Morey Creek Interceptor (MRI) was constructed in 1975 and carries sanitary sewage from the Western portion of the Urban Area of Albemarle County Southward, towards the Moores Creek Interceptor and ultimately the Moores Creek Advanced Water Resource Recovery Facility (MCAWRRF). The uppermost reach of MRI is known as the Upper MRI and is a 12" sanitary sewer that originates just North of the Birdwood Golf Course. From the first manhole (MH-66) to the manhole on MRI where RWSA's Crozet Interceptor (CZI) ties in (MH-45), the sewer is characterized by small residential and non-residential direct connections and acts as a low-flow collector sewer. At MRI-MH-45, CZI ties into MRI, and the downstream portions of MRI act as a typical RWSA Interceptor, with high flows and relatively few direct connections. The number of residential connections upstream of MRI-MH-45 is increasing each year, due to existing septic systems tied to homes in the Bellair and Liberty Hills Neighborhoods failing. It is RWSA staff's understanding that ACSA intends to extend sanitary sewer service to these neighborhoods, and the Upper MRI will ultimately become a part of this new collector system.

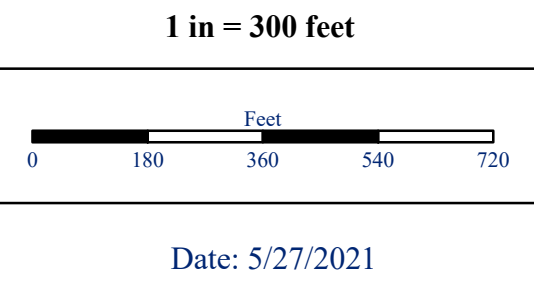
In 2019, Closed-Circuit Television (CCTV) footage revealed that the 12" Upper MRI was in need of significant amounts of sewer and manhole rehabilitation, to include cured in place piping (CIPP), manhole coatings, and point repairs. These efforts were completed in May 2021. With Upper MRI rehabilitated to the confluence of MRI & CZI, and the low flow characteristics of Upper MRI, staff recommends the Upper MRI from MRI-MH-66 to MRI-MH-45 be transferred to ACSA.

Board Action Requested:

Authorize the Executive Director to execute a deed with the Albemarle County Service Authority that will transfer ownership of the Morey Creek Interceptor upstream of MRI-MH-45 to ACSA. RWSA will retain ownership of MH-45 and all of MRI downstream of this manhole.



UPPER MOREY CREEK INTERCEPTOR





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


Data used in this map was provided by the RWSA, ACSA, City of Charlottesville, UVA FM Dept., and Albemarle Co. GDS. Duplication of data or redistribution of this map without permission from the RWSA Engineering Dept. is prohibited.



695 Moores Creek Lane | Charlottesville, Virginia 22902-9016

434.977.2970 

434.293.8858 

www.rivanna.org 

MEMORANDUM

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

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: CONCURRENT RESOLUTION OF THE CITY COUNCIL OF THE
CITY OF CHARLOTTESVILLE, VIRGINIA AND THE BOARD OF
SUPERVISORS OF THE COUNTY OF ALBEMARLE, VIRGINIA
TO EXTEND THE EXISTENCE OF THE RIVANNA WATER AND
SEWER AUTHORITY**

DATE: APRIL 26, 2022

As was noted during our March meeting, the Virginia Water and Wastewater Authorities Act requires Authorities to be reauthorized every 50 years. RWSA was incorporated by the State Corporation Commission at the request of City Council and the Board of Supervisors in June 1972. This resolution has been submitted for approval to City Council and the Board of Supervisors.

Board Action Requested:

No Action is required.

CONCURRENT RESOLUTION OF
THE CITY COUNCIL OF THE CITY OF CHARLOTTESVILLE, VIRGINIA AND
THE BOARD OF SUPERVISORS OF THE COUNTY OF ALBEMARLE, VIRGINIA
TO EXTEND THE EXISTENCE OF THE RIVANNA WATER AND SEWER AUTHORITY

WHEREAS, by concurrent resolution of the City Council of the City of Charlottesville, Virginia (the “City”) and the Board of Supervisors of the County of Albemarle, Virginia (the “County”) and a certificate of incorporation issued by the Virginia State Corporation Commission pursuant to the Virginia Water and Sewer Authorities Act (currently enacted as the Virginia Water and Waste Authorities Act, Virginia Code Section 15.2-5100 et seq.), the Rivanna Water and Sewer Authority (the “Authority”) was incorporated as a public body politic and corporate on June 7, 1972; and,

WHEREAS, pursuant to Virginia Code Section 15.2-5114, the Authority can only be authorized to exist for a period of up to 50 years as a corporation, and for such further period or periods as may from time to time be provided by resolution of the political subdivisions which are members of the Authority; and

WHEREAS, the City and the County, as the political subdivisions which are members of the Authority, now wish to extend the existence of the Authority for an additional 50 years; and

WHEREAS, pursuant to Virginia Code Section 15.2-5104, the City and the County caused to be advertised in a newspaper of general circulation in the City and the County a descriptive summary of this Concurrent Resolution with a reference to the location in the City and the County where a copy of the Resolution could be obtained, and giving notice of the date on which public hearings would be held on the proposed Concurrent Resolution; and,

WHEREAS, public hearings on the proposed Concurrent Resolution were held by the Charlottesville City Council on _____, 2022 and by the Albemarle County Board of Supervisors on _____, 2022.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Charlottesville, Virginia and the Board of Supervisors of Albemarle County, Virginia that:

(1) The existence of the Authority is hereby extended for an additional fifty (50) years from the date of approval and adoption of this Concurrent Resolution.

IN WITNESS WHEREOF, the City Council of the City of Charlottesville and the Board of Supervisors of the County of Albemarle have extended the existence of the Authority pursuant to Virginia Code Section 15.2-5114 in the name of the City of Charlottesville and the County of Albemarle, respectively, by their presiding officers and attested by their Clerks this _____ day of _____, 2022.

CITY OF CHARLOTTESVILLE, VIRGINIA

By: _____
J. Lloyd Snook, III, Mayor

Attest:

Kyna Thomas, Clerk, City Council

COUNTY OF ALBEMARLE, VIRGINIA

By: _____
Donna P. Price, Chair

Attest:

Claudette K. Borgersen, Clerk, Board of Supervisors



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: AWARD OF TERM CONTRACT FOR EASEMENT ACQUISITION
AND REAL ESTATE SERVICES (RFP 22-02)

DATE: APRIL 26, 2022

This recommendation is to award a Term Contract (one year, with the option for four one-year renewals) to the firm ERM to provide a wide range of easement acquisition and real estate services including easement negotiation, real estate contract negotiation, appraisals, title searches, document creation and review, site selection services, and support with buying and selling property. RWSA has maintained a very helpful term contract for Easement Acquisition and Real Estate Services for ten years.

Background:

RWSA has maintained a term contract for Easement Acquisition and Real Estate Services for two five-year terms. Over the course of those contracts, access to a wide variety of real estate services, including property and easement negotiation, title reports and appraisals, and related services have proved invaluable to the Authority. As the current contract will be expiring soon, RWSA needed to procure these services again.

A Request for Proposals (RFP) 22-02 was developed and advertised by RWSA and issued jointly with RSWA on March 3, 2022. Five proposals were received on March 29, 2022. The selection committee short-listed and interviewed three firms on April 6-7, 2022. Based upon the qualifications provided in the RFP, the selection committee found that ERM and Associates (ERM) was best qualified to provide these services. ERM provides a wide range of services including, but not limited to, easement negotiation, land acquisition negotiation, real estate contract negotiation, appraisals, title searches, document creation and review, site selection services, and support with buying and selling property. They have grown their staff in recent years and are well equipped to handle a wide range of project sizes. Lastly, ERM has continually provided an exemplary level of service to RWSA over the last ten years and have completed recent work for the City of Charlottesville, and therefore have a strong connection to and understanding of Charlottesville and Albemarle County.

Board Action Requested:

Authorize the Executive Director to execute a Term Agreement with ERM and Associates for Easement Acquisition and Real Estate Services, and future work authorizations under the conditions of the Term Agreement.



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: CONSTRUCTION CONTINGENCY ADDITION – MOORES
CREEK AWWRF LIGHTING IMPROVEMENTS PROJECT

DATE: APRIL 26, 2022

This request is to increase the authorized construction contingency from \$90k to \$150k for this project, with no increase to the total CIP project budget of \$1.9 M. To continue to reduce the impact of the facility lighting on the surrounding community, additional modifications to existing lights have been identified. This includes the adjustment of some lighting fixture angles, placement of switches on some existing lights which would allow our Operations staff to only turn select lights on when necessary, and replacement of some additional walkway lighting. To perform this additional work, an increase in the project contingency of \$60,000 is being requested. The construction contract will be increased from \$349k to approx. \$430k with the proposed, and prior, contingency increase.

Background

The RWSA engineering consultant developed a preliminary engineering report (PER) and site plan amendment for lighting modifications at Moores Creek that considered site safety requirements and the need to bring the facility into compliance with the Albemarle County lighting ordinance. Following submission of the site plan amendment, staff divided the over 300 fixtures to be installed or replaced into two groups; fixtures to be modified in-house by the Maintenance Department and fixtures to be installed by an outside electrical contractor. The Maintenance Department has completed the lighting modifications they were capable of, and a contract was awarded to Pyramid Electrical Contractors on January 26, 2021 to perform the remaining work.

As this project has progressed, and to continue to reduce the impact of the facility lighting on the surrounding community, additional modifications to existing lights have been identified. This includes the adjustment of some lighting fixture angles, placement of switches on some existing lights which would allow our Operations staff to only turn select lights on when necessary, and replacement of some additional walkway lighting. To perform this additional work, an increase in the project contingency of \$60,000 is being requested. The Board recently approved an increase in the project contingency from 10% (\$34,900) of the original bid value (\$349,000) to a revised total value of \$90,000, which equates to approximately 26% of the original bid value. With the requested additional increase of \$60,000, the revised total contingency value would be approximately 43% of the original bid value.

Board Action Requested:

Authorize an increase in construction contingency funding of \$60,000 for the MCAWRRF Lighting Improvements Project. This would bring the total authorized contingency to \$150,000. The total costs remain within the CIP Budget of \$1,900,000 for this project.



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: CAPITAL IMPROVEMENT PLAN BUDGET AMENDMENT –
SOUTH RIVANNA WATER TREATMENT PLANT,
REHABILITATION AND EXPANSION PROJECT**

DATE: APRIL 26, 2022

This request is to increase the authorized construction contingency from approx. \$860k to \$1.3M for the South Rivanna Water Treatment Plant (SRWTP) renovation project. As work at the SRWTP has progressed, additional improvements have been identified that were beneficial to RWSA and cost effective given the presence of a general contractor already on site. Some of these improvements include replacement of the wash troughs in the existing four filters, installation of new sludge pumps in the Sludge and Recycle Pumping Vault, and a revised method of lead abatement work throughout the main Filter Building to accommodate staff operations in the spaces. This amendment would bring the total budget for the South Rivanna Water Treatment Plant Improvements project to \$20,400,000.

Background

The South Rivanna Water Treatment Plant (SRWTP) is a conventional water treatment plant that was constructed in 1964 and expanded in 1984 and currently supplies the majority of the water to the RWSA's Urban Water System. A Needs Assessment Study was performed for this plant, which identified the need for general improvements including but not limited to; expansion of existing chemical storage facilities, two additional filters, a new administration building for Water Department staff, pumping improvements throughout the plant, electrical and mechanical service improvements, and general renovations.

Improvements at the SRWTP were bid together with similar improvements at the Observatory Water Treatment Plant (OBWTP) and the construction contract was awarded to English Construction Company for a total base bid value of \$36,748,500 at the January 28, 2020 Board meeting. A Notice to Proceed was issued to English on May 18, 2020 and work began with an initial focus on the SRWTP site. As work at the SRWTP progressed, additional improvements were identified that were beneficial to RWSA and cost effective given the presence of a general contractor already on site. Some of these improvements include replacement of the wash troughs in the existing four filters, installation of new sludge pumps in the Sludge and Recycle Pumping Vault, and a revised, safer method of lead abatement work throughout the main Filter Building.

When this project was awarded, a 10% construction contingency (\$3,674,850), based on the total base bid of English's construction contract, was authorized by the Board. From a Capital Improvement Plan (CIP) budgeting standpoint though, a construction contingency of only 5% for each treatment plant improvement project (SRWTP and OBWTP are listed separately in the CIP) was included for funding purposes given the size of the overall project. Based on the contractor's schedule of values, the SRWTP portion of the total base bid is \$17,210,206.22, so a 5% contingency would equate to \$860,510.31. Based on the additional improvements that were identified at the SRWTP site, an increase to the CIP budget for that project would be necessary to account for the additional expense. As a result, we are requesting an additional \$400,000 be added to the CIP budget, which would adjust the total available contingency for the SRWTP portion of the project to \$1,260,510.31 which would be 7.3% of the SRWTP portion of the base bid (less than the Board authorized 10%).

Board Action Requested:

Amend the Capital Improvement Plan for Fiscal Years 2022 – 2026 to include a budget increase for the South Rivanna Water Treatment Plant Improvements project of \$400,000 in Fiscal Years 2022 and 2023. This amendment would bring the total budget for the South Rivanna Water Treatment Plant Improvements project to \$20,400,000.



MEMORANDUM

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

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

**SUBJECT: BUCK MOUNTAIN PROPERTY MANAGEMENT UPDATE:
LEASE AND SALE PROCEDURES**

DATE: APRIL 26, 2022

This memo and presentation today are to request approval of the attached General Administrative Procedure (GAP #17) which outlines the criteria and process to be used for the lease and sale of real estate parcels included in the Buck Mountain property. After extensive research and discussion with our attorney, the current lease and sale procedure recommendations generally include:

- A. Offer property for lease, in the following order:
 - 1. to existing lessees for renewal at the current market rates
 - 2. to adjacent resident property owners. These owners help us monitor the properties.
 - 3. to the public
- B. Offer any property for sale to the public through a sealed bidding process at a minimum fair market value, followed by a Public Hearing conducted by the Board before executing a contract with the highest responsive bidder. Only property above elevation 474, the planned normal pool elevation of the reservoir plus a 10 foot (vertical) high water buffer, will be consider for any sale.

Notes:

- A. Properties recommended to be offered for new 5-year leases include:
 - 1. TMP 29-33F to adjacent resident owner of TMP 29-33
 - 2. TMP 29-33C to adjacent resident owner of TMP 29-34D
 - 3. TMP 29-36A to adjacent resident owner of TMP 29-36
- B. The only property recommended to be offered for sale to the public at this time includes the Elliot House with 2.2 acres from TMP 29-35H. The sale of any RWSA property will require prior approval from our Bond Trustees.

Background:

The Buck Mountain property is located in the Free Union area of Albemarle County. The 1,314-acre property was originally purchased in the 1980s for construction of a water supply reservoir. However, due to environmental restrictions imposed when an endangered species was located on the property, the James spiny mussel, a regulatory permit could not be obtained. A significant portion of the property, about 600 acres,

was placed in restrictive-use deeds in 2014 to create vegetated stream buffers to mitigate the environmental impacts from construction of the expanded Ragged Mountain reservoir and dam.

Chronology of Recent Events during Board Meetings:

- April 2019: a former property owner, Dr. Harry Wellons, requested the Board to consider selling the Buck Mountain property RWSA acquired from him by condemnation in the 1980's.
- June 2019: staff provided a presentation on the Buck Mountain property. The Board requested staff to prepare a Buck Mountain Master Plan to optimize use of the property.
- August 2020: staff presented a Master Plan to the Board. The Board concurred with a staff recommendation to develop a more detailed Property Management Plan.
- February 2022: the Board concurred with a staff recommendation to further investigate the leasing and sale of several parcels.
- March 2022: the Board held a Public Hearing and received comments from several members of the public about the proposed transactions.

Additional information:

- Nine 2-year leases were recently renewed with existing lessees, as shown by the attached table.
- Our attorney affirmed that we did not have any legal requirement to offer parcels for sale to prior owners, including the two parcels that were condemned.

Board Action Requested:

Approve General Administrative Procedure #17, "Lease and Sale of Buck Mountain Real Estate".

Attachments:

1. GAP # 17: Lease and Sale of Buck Mountain Real Estate
2. Lease Summary Table

GENERAL ADMINISTRATIVE PROCEDURES

| | |
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| 17. Lease and Sale of Buck Mountain Real Estate | Prepared By: Executive Director |
| Approved: April 26, 2022 | Updated: |

Purpose

To establish lease and sale procedures for Buck Mountain real estate.

Buck Mountain Real Estate Lease and Sale Procedures

Factors Considered:

- RWSA maintains broad discretion to consider a wide variety of parcel characteristics and benefits to RWSA's mission and property management process when deciding to lease or sell any property.
- Lease criteria recognize resident adjacent property owners because they are in the best position to informally assist RWSA with management of the properties by monitoring for issues including trespassing.
- Lease and sale criteria differ since RWSA retains ownership and interest in leased property.
- Leases and sales will be at market value, as determined by RWSA, or at a greater value if offered through sealed bidding.

The following processes will be utilized to lease and sell Buck Mountain real estate:

1. Lease of Real Estate

a. Criteria

- All parcels are potentially eligible for leasing under specific terms and conditions determined by RWSA.
- Leases will use standard RWSA terms which may reflect specific use limitations for certain parcels and will be subject to any existing use restrictions.

b. Process

- Offer for renewal to existing lessees.
- Offer to adjacent resident property owner(s). If there is only one adjacent resident property owner, the lease would be based on the fair market value established for use in 1.b.i.
- Request sealed bids if there are multiple adjacent resident property owners. The solicitation will specify the minimum bid to be submitted based on the fair market value established in 1.b.i. Execute lease with the highest responsive bidder.
- If a lease is not executed with an adjacent resident property owner and the property is accessible to the public, offer lease to the public by sealed bids. The

solicitation will specify the minimum bid to be submitted based on the fair market value established in 1.b.i. Execute lease with the highest responsive bidder.

2. Sale of Improved and Unimproved Real Estate

a. Criteria

- i. Land must be above the ground elevation level of 474 ASL (the normal pool level of the planned reservoir + 10 vertical feet).
- ii. Any sale will be contingent upon approval by RWSA following a public hearing.

b. Process

- i. Offer property to the public for sealed bidding. The solicitation will specify the minimum bid to be submitted based on the fair market value determined by RWSA. Execute sale with the highest responsive bidder.

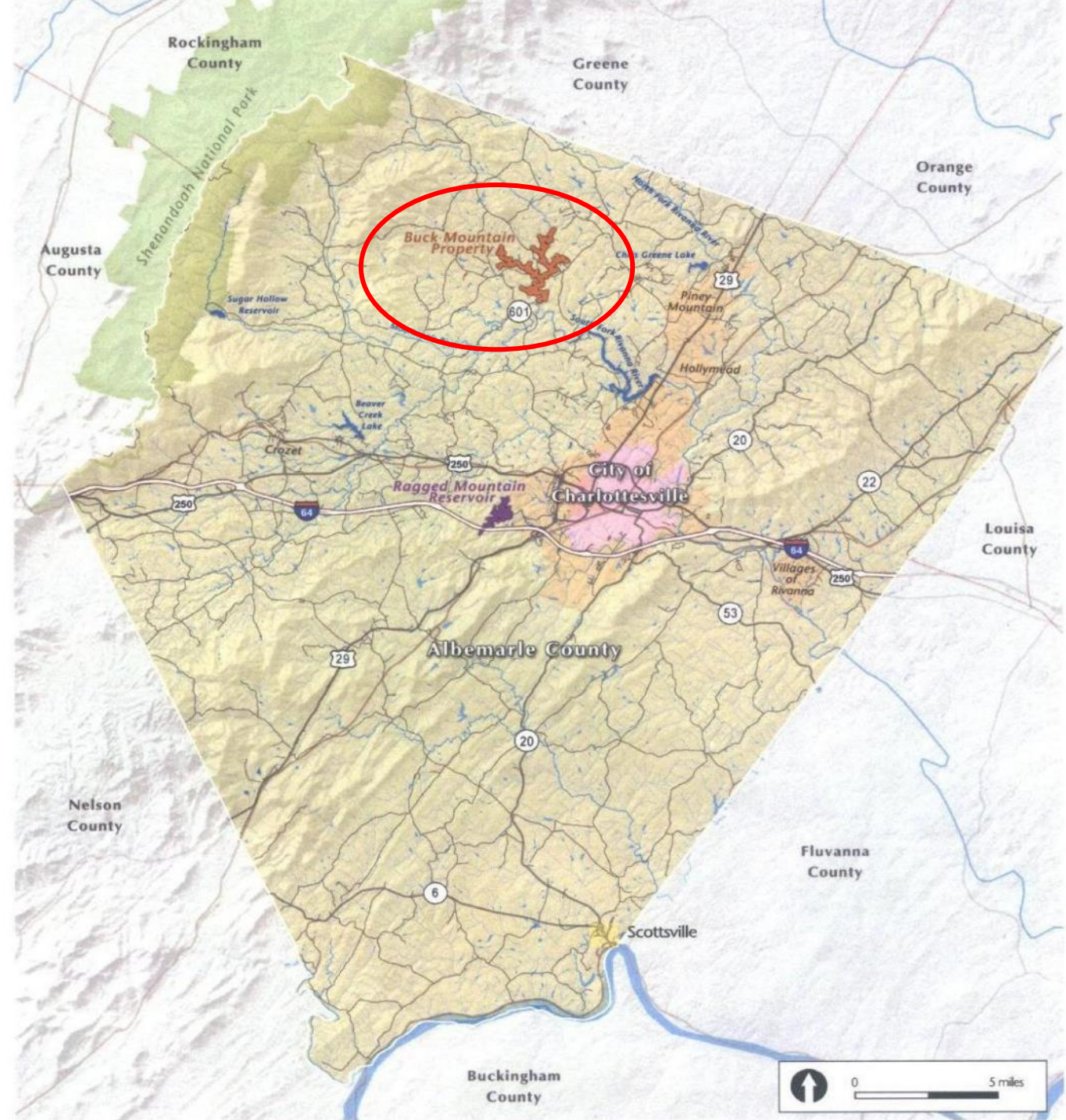
Buck Mountain Leases - Summary Table

| Current Leases Renewed | Tax Map Parcel # | Acreage | Lease Term | Total Cost \$ |
|-------------------------------|-------------------------|----------------|--------------------------|--------------------------|
| Ashcom | 30-1A | 20 | 3/1/22-2/29/24 | 738 |
| Durbin | 29-34A | 25.12 | 3/1/22-2/29/24 | 858 |
| Johnson | 17-22D | 18.17 | 3/1/22-2/29/24 | 4,262 |
| | 17-21G | 24.51 | | |
| | 29-33B1 | 66.02 | | |
| | 29-33E | 27.72 | | |
| McCauley | 29-35E | 1.35 | 3/1/22-2/29/24 | 146 |
| Miller | 29-49A1 | 1.445 | 3/1/22-2/29/24 | 2038 |
| | 29-49A2 | 59.87 | | |
| | 29-45A1 | 2.581 | | |
| Mooney | 18-10G | 27.36 | 3/1/22-2/29/24 | 1,008 |
| North | 17-35D4 | 117.95 | 3/1/22-2/29/24 | 4,050 |
| Wellons-Smith | 18-11A1 | 83.75 | 3/1/22-2/29/24 | 2,728 |
| Wilson | 18-10F1 | 8.56 | 3/1/22-2/29/24 | 352 |
| | | | Total 2 year cost | \$16,180 |
| | | | Prior 2 year cost | \$3,800 |
| New lease offerings | | | | |
| Matt Lucas | 29-36A | 63.01 | 5 years | TBD |
| Ramiiisol Vineyards | 29-33F | 28.07 | 5 years | TBD |
| Susan Minor | 29-33C | 10.72 | 5 years | TBD |



Buck Mountain Property Update: Lease and Sale Procedures

Presented by:
Bill Mawyer, Executive Director
April 26, 2022



Master Plan completed in 2020

An evaluation of the uses of the Buck Mountain property with respect to the Vision, Mission and Values of RWSA.

Strategic Plan Goals

- Environmental Stewardship
 - Water Quality Protection
- Operational Optimization
 - Efficient and sustainable use of resources
- Infrastructure and Master Planning
 - Water Supply now and in the future

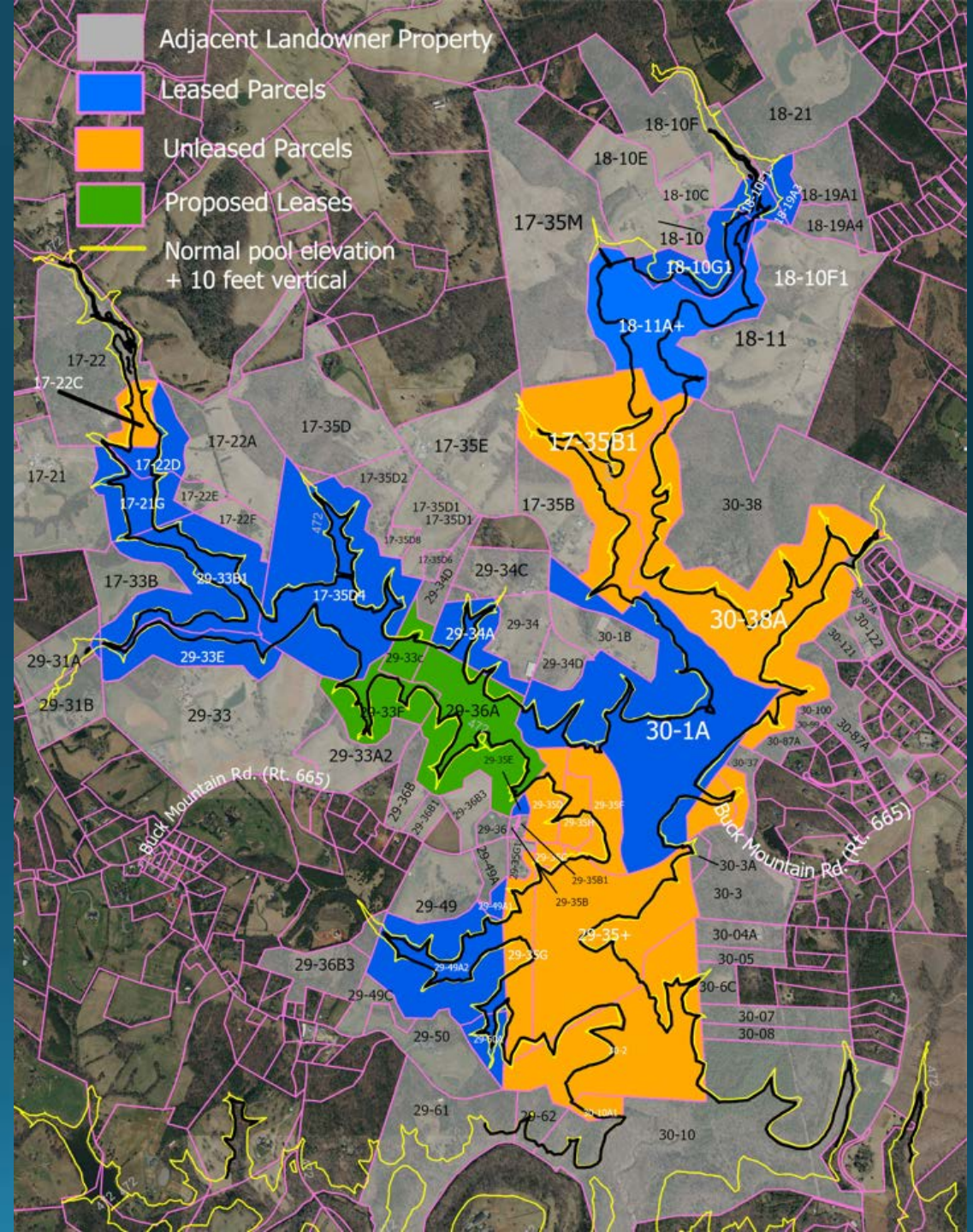


Lease of Real Estate

Process

1. Offer for renewal to existing lessees.
2. Offer to adjacent resident property owner(s) to informally assist staff with property monitoring. If there is only one adjacent resident property owner, the lease would be based on the fair market value established for use in #1.
3. Request bids if there are multiple adjacent resident property owners. The solicitation will specify the minimum bid to be submitted based on the fair market value established in #1.
4. If the property is accessible to the public, offer lease to the public by sealed bids. The solicitation will specify the minimum bid to be submitted based on the fair market value established in #1.

(*TMPs 29-33F, 29-33C and 29-36A are recommended to be offered to adjacent resident property owners.)



Sale of Improved and Unimproved Real Estate

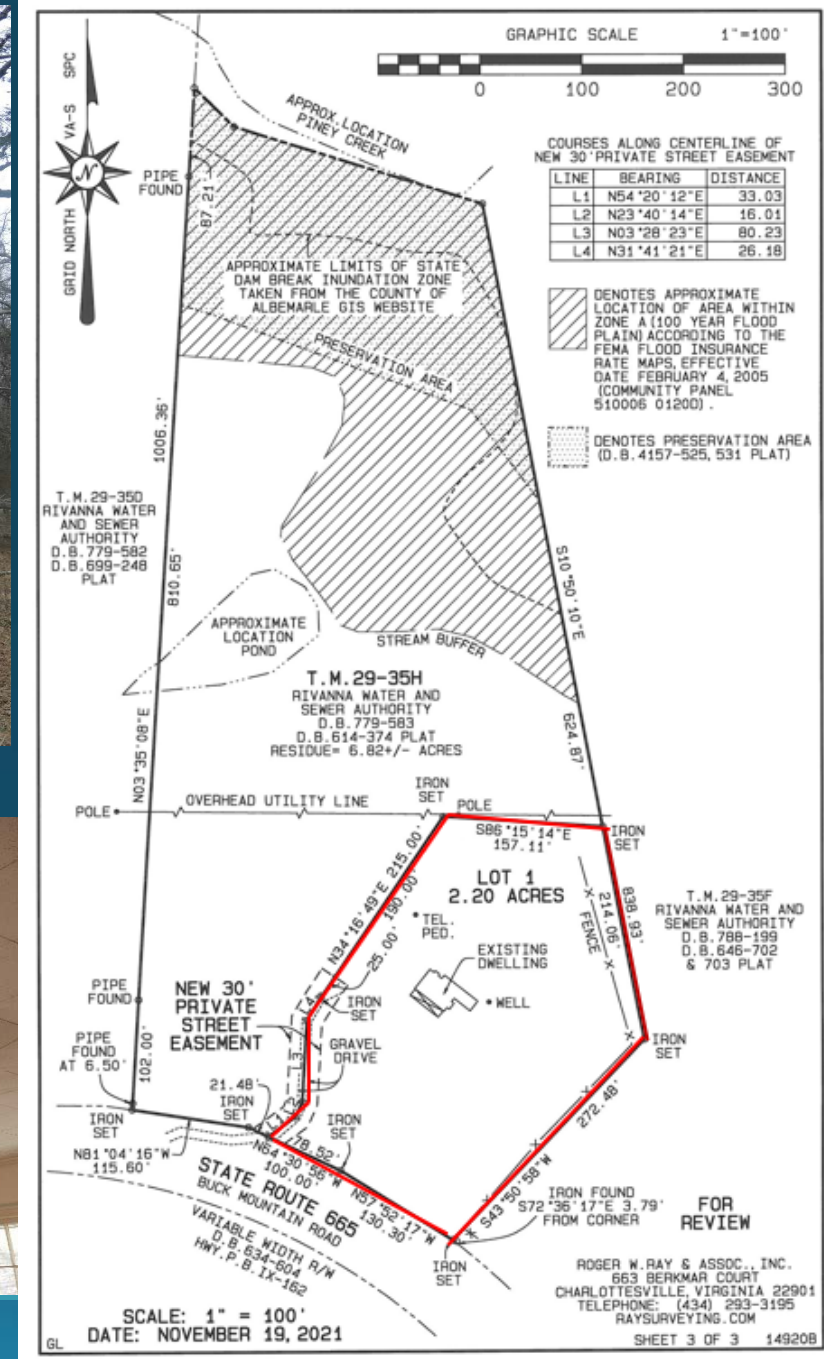
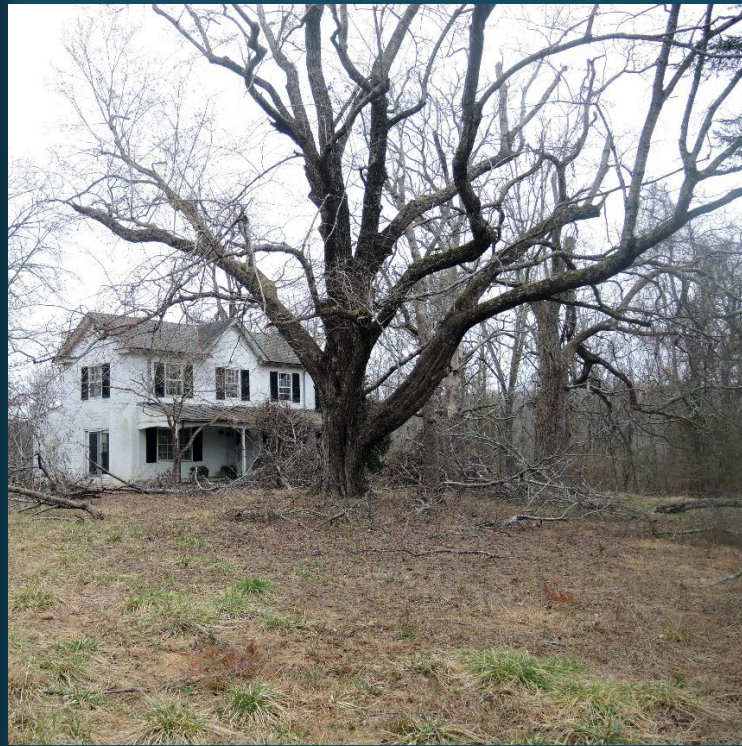
A. Criteria

1. Property must be above the ground elevation level of 474 ASL (normal pool level of the planned reservoir + 10 vertical feet).

B. Process

1. Offer property to the public for sealed bids. The solicitation will specify the minimum bid to be submitted based on the fair market value determined by RWSA.
2. Conduct a Public Hearing before approving the sale.

(*The only property recommended to be offered for sale to the public at this time is the Elliot House with 2.2 acres from TMP 29-35H.)



Summary

A. Offer property for lease, in the following order:

1. to existing lessees for renewal
2. to adjacent resident property owners. These owners help us monitor the properties.
3. to the public

B. Offer property for sale to the public:

- through a sealed bidding process at a minimum fair market value
- followed by a Public Hearing conducted by the Board before executing a contract with the highest responsive bidder.

*Property must be above elevation 474, the planned normal pool elevation of the reservoir plus a 10 foot (vertical) “high water” buffer, to be considered for any sale.

Questions?

Action Requested:

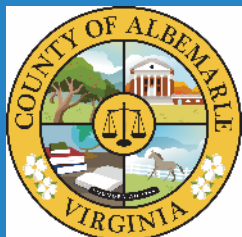
Approve the procedure for the “Lease and Sale of Buck Mtn Real Estate”.

Review of RWSA Organizational Agreements

PRESENTED TO THE BOARD OF DIRECTORS
BY BILL MAWYER, EXECUTIVE DIRECTOR
APRIL 26, 2022



Foundation Documents



1. Articles of Incorporation, 1972:

- The State Water Control Board notified the City and County about the availability of \$13 M in Federal and State grants conditioned that the City and County must designate a single political entity to represent both localities.
- By Concurrent Resolution of City Council and the Albemarle Board of Supervisors, the State Corporation Commission was notified of the intention to create the Rivanna Water Sewer Authority pursuant to the Virginia Water and Sewer Authorities Act (1950). RWSA was incorporated as a public body politic and corporate on June 7, 1972.
- For the purpose of acquiring, financing, constructing and maintaining facilities for a potable water supply and for abatement of pollution resulting from sewage from the City and the County.
- 5 Board Members: 2 from City, 2 from County and 1 jointly appointed.
- Prohibited RWSA from contracting with any other party in the City or County for water or sewer services.

2. Service Agreement, 1973 (aka “Four Party Agreement”) City, County, ACSA and RWSA, included:

- Acquisition of existing water and wastewater facilities from the City and ACSA by RWSA.
- Construction and payment (bonds) for new facilities.
- RWSA to be sole producer of potable water and treatment of wastewater.
- Rates and Charges
 - RWSA water rates shall be uniform for the Urban area.
 - Wastewater rates shall not be uniform. Wastewater operation and maintenance costs shall be uniform, but the City will pay one-half the debt service costs as the ACSA.
- Term: June 30, 2012, or until bonds have been paid, with 2 years written notice of termination.

3. By-Laws of RWSA, 1973

Revisions to the Articles of Incorporation



4. Amended and Restated Articles of Incorporation, 1985:

- Limited RWSA to serve only the City and ACSA for the treatment and transmission of potable water and the treatment and disposal of sewage.

5. Second Restated Articles of Incorporation, 1986:

- Placed the Executive Director of the ACSA, or such Albemarle County Department Head as the Board of Supervisors may appoint, on the Board of the RWSA in lieu of the County Engineer of Albemarle County.

6. Third Restated Articles of Incorporation, 2009:

- Increased the number of members of the RWSA Board from 5 to 7 through the addition of 1 member of City Council and 1 member of the Albemarle Board of Supervisors.

7. Forth Restated Articles of Incorporation, 2017:

- Placed the City Director of Utilities, or such Department Head as City Council may appoint, on the Board of the RWSA in lieu of the City Director of Public Works.

Revisions to the By – Laws



Mike Gaffney



Jeff Richardson



Michael Rogers



Lauren Hildebrand



Gary O'Connell



Brian Pinkston



Ann Mallek

RWSA Board of Directors

8. By- Laws, 1973; Amendments:

- 1975: Established the Officers of the Board of Directors, an Executive Director position, schedule of meetings (3rd Monday at 403 Eighth St), agenda order of business for public Board meetings, all members must be present to amend the By-Laws.
- 1983: Allowed a designated Alternate to attend meetings, but not vote.
- 1986: Changed meetings from third Monday to fourth Monday.
- 2010: Included a requirement to have a Board of Directors; changed meetings from 4th Monday to 4th Tuesday.
- 2014: Allowed Board members to participate remotely in Board meetings through electronic communications, a quorum (4) must be physically present at the meeting.
- 2016: Authorized the Executive Director to sign contracts ≤ \$100k.
- 2020 : Authorized Executive Director to sign contracts ≤ \$200k.

Major Facilities



- 9. Working Agreement on Urban Area Wholesale Flow Allocation and Billing Methodology, 1983:**
 - Water and Wastewater treatment charges determined by applying RWSA rates to the total amount of water produced, with the total cost proportionally allocated to the City and ACSA based on their usage as obtained from their customer meter readings.
- 10. Joint Resolution, 1983:**
 - Purchased Buck Mtn property (1314 acres) for a drinking water supply reservoir; created Buck Mtn Surcharge on new public water connections in the City and County.
- 11. Southern Loop Agreement, 1987:**
 - Plan and cost allocation for water lines and storage tanks from OBWTP to Avon St (Western Branch; completed), and from Avon St to E. High St. (Eastern Branch; recently replanned for a corridor near the center of the City; “Central Water Line”).
- 12. Moore’s Creek Relief Sewer Project, 1990:**
 - New sewer line to parallel the existing Moore’s Creek Interceptor Line from Quarry Road to the MCAWRRF.
- 13. Urban Water Line, 1993:**
 - Funding formula for a water line along Berkmar Drive (52% City/48% ACSA).
- 14. South Rivanna WTP Expansion Agreement, 2003:**
 - Allocated capacity and cost of 4 mgd expansion of SRWTP: 100% ACSA
 - Allocated non-capacity CIP costs for Urban Water System: 48% City / 52% ACSA.
 - Allocated Urban plants capacity and South Fork Rivanna Reservoir safe yield.

Major Facilities



15. Ragged Mtn Dam Project Agreement, 2012:

- RWSA to design and build new Ragged Mtn Dam and pipeline from SFRR to RMR.
- Water Supply and Demand studies every decade beginning 2020.
- Wholesale Meter system to be constructed, maintained and reported monthly.
- RMR leased from City for 40 years (2052).

16. Water Cost Allocation Agreement, 2012:

- Allocated cost of RMR dam (85% ACSA/15% City) and pipeline (80% ACSA/20% City).
- Allocated Urban Water System supply (safe yield), to be monitored by Wholesale Meter System.

17. Wastewater Projects Cost Agreement, 2014:

- Allocated cost of new Rivanna Pump Station and future capacity and non-capacity wastewater CIP projects, based on actual wastewater flows updated every 5 years.

18. Amendment to the “4 Party Agreement”, 2015:

- Debt service charges to be computed as a monthly charge, rather than included in the Water and Wastewater Rates.

19. Joint Resolution, 2019:

- Ended the Buck Mtn surcharge.

20. Observatory WTP, Raw Water Pumping and Piping Upgrade Cost Allocation Agreement, 2020:

- Allocated costs for additional capacity in these facilities.
- Commitment to construct the Central Water Line centrally thru the City with the location to be identified by the RWSA

21. Observatory WTP Ground Lease; 2020:

- 49-year lease with UVA. \$175k / year with annual CPI-U increase updated every 10 years.

22. Northern Area Drinking Water Projects Agreement; 2022 (proposed)

- Allocates costs for new drinking water facilities to be constructed north of the South Fork Rivanna River.

Summary

- Since RWSA was created 50 years ago, a large number of Agreements have been established to allocate assets and costs.
- Staff must accurately administer these Agreements to properly manage our resources, budgets, and charges to the City and ACSA.

Questions?