

Board of Directors Meeting

November 15, 2022 2:15pm





BOARD OF DIRECTORS

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

DATE: November 15, 2022

LOCATION: Conference Room, Administration Building

695 Moores Creek Lane, Charlottesville, VA

TIME: 2:15 p.m.

AGENDA

- 1. CALL TO ORDER
- 2. AGENDA APPROVAL
- MINUTES OF PREVIOUS BOARD MEETING ON OCTOBER 25, 2022
- 4. RECOGNITION
- EXECUTIVE DIRECTOR'S REPORT
- 6. ITEMS FROM THE PUBLIC Matters Not Listed for Public Hearing on the Agenda
- 7. RESPONSES TO PUBLIC COMMENTS
- 8. CONSENT AGENDA
 - Staff Report on Finance
 - b. Staff Report on Operations
 - c. Staff Report on Ongoing Projects
 - d. Staff Report on Wholesale Metering
 - e. Approval of Board Meeting Schedule for Calendar Year 2023

9. OTHER BUSINESS

a. Presentation, Public Hearing and Vote on Approval – Sale of 1880 Buck Mountain Road Andrea Bowles, Water Resources Manager

b. Presentation and Vote on Approval: Financial Update – Year End Results Lonnie Wood, Director of Finance and Administration

(Joint Session with the RSWA)

- c. Presentation and Vote on Approval: Remote Participation Policy and Amended and Restated By-Laws Bill Mawyer, Executive Director
- d. Presentation and Vote on Approval: Strategic Plan 2023 Update Bill Mawyer, Executive Director
- e. Presentation: Safety Program Update Elizabeth Coleman, Safety Manager

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

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

11. CLOSED MEETING

12. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT RIVANNA BOARD OF DIRECTORS MEETINGS

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

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

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

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

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

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

Rev. September 7, 2022

www.rivanna.org



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RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
October 25, 2022

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> A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, October 25, 2022 at 2:15 p.m. in the 2nd floor conference room, Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia.

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

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Board Members Absent: Michael Gaffney, Chair.

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Rivanna Staff Present: Bill Mawyer, Jennifer Whitaker, David Tungate, Andrea Bowles, Dyon Vega, Scott Schiller, Michelle Simpson, Lonnie Wood, Victoria Fort, Deborah Anama.

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Attorney(s) Present: Carrie Stanton.

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1. CALL TO ORDER

In Mr. Gaffney's absence due to a medical condition which prevented his attendance, Mr. 21

Rogers, Vice-Chair, convened the October 25, 2022 regular meeting of the Board of Directors of 22 the Rivanna Water and Sewer Authority at 2:15 p.m. 23

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2. AGENDA APPROVAL

There were no comments or questions on the agenda.

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Mr. Pinkston moved to approve the agenda. Ms. Mallek seconded the motion, which was carried unanimously (6-0).

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3. MINUTES OF PREVIOUS BOARD MEETING

a. Minutes of Regular Board Meeting on September 27, 2022 32 33

There were no comments or questions on the minutes for the September 27, 2022 meeting.

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Ms. Mallek moved that the Board approve the minutes of the September 27, 2022 meeting as presented. Mr. O'Connell seconded the motion, which passed unanimously (6-0).

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4. RECOGNITIONS

There were none. 39

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5. EXECUTIVE DIRECTOR'S REPORT

Mr. Mawyer announced that in terms of workforce development, he would recognize three of the 42 Authority's staff as examples of "home-grown" Water and Wastewater Operators. He stated that 43 the three individuals joined the Authority unlicensed, and all had recently passed their licensing 44

exams. 45

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- Mr. Mawyer noted that all three of the employees had college degrees—Cary Wingo was a civil 47
- engineer from UVA, Jeremy Lawson was an astrophysicist from UVA, and Alison Henry was a 48
- biology major from VCU. He noted that they had only been employed by the Authority for one 49
- or two years. He stated that the Water and Wastewater Department Managers provided training 50
- and resources to better enable staff to successfully complete the state licensing exams required 51
- for these positions. 52

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- Mr. Mawyer announced that Liz Coleman, Safety Manager, had applied for and received a 54 \$4,000 grant from the Virginia Risk Sharing Association, our liability insurance carrier. He 55 stated that they used the funds to purchase manhole safety guards to assist staff when required to 56
- enter confined spaces. 57

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- Mr. Mawyer stated that they continued to work on the infrastructure and master planning goals. 59
- He noted that there were several pipeline projects underway, such as the Rivanna to Ragged 60
- Mountain pipeline. He stated that they continued to work with the UVA Foundation and one 61
- private owner to obtain the final easements for the eight-mile-long pipeline from the Rivanna 62
- Reservoir to Ragged Mountain. 63

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- Mr. Mawyer stated that they were coordinating with UVA and the UVA Foundation for the last 2 65
- easements required to build a raw water pipeline from Ragged Mountain to the Observatory 66
- WTP. 67

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- Mr. Mawyer stated that they continued to communicate and collaborate. He announced that 69
- Andrea Bowles, Water Resources Manager, recently attended the Rivanna River Basin 70
 - Commission Annual Conference along with Ms. Mallek, who is the Chair of the Commission.

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Mr. Mawyer stated that Liz Coleman led a regional safety meeting with several safety professionals from the Authority, the City, and Waynesboro Public Schools. He stated that they encouraged staff to communicate and network, locally and regionally.

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- Mr. Mawyer stated that they celebrated October 18 as the 50th anniversary of the Clean Water
- Act, approved by Congress through a congressional override of a presidential veto in 1972. He 78
- 79 stated that the Act was intended to regulate the discharge of pollutants into U.S. waters. He
- stated that one of the poster children of the legislation was the Cuyahoga River burning because 80
- it was so polluted. 81

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- Mr. Mawyer attributed the solving of the Kepone issue in the region to the Clean Water Act. He stated that there would be a presentation today about what could be done to protect and monitor the streams in the area.
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87 Mr. Pinkston asked Mr. Mawyer to explain what Kepone was.

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Mr. Mawyer explained that Kepone was an ant and roach pesticide that was toxic, and in the 89 past, it had been dumped in the rivers of Virginia. 90

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Ms. Mallek stated that it was dumped below the falls of the James River, resulting in the river

no	t beir	ng fishable or swimmable, and the fish could not be eaten for 15 years.
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		wyer stated that the next Board meeting would be in three weeks, on November 15, as
the	ey acc	commodated the holiday schedule.
	TTT	EMC EDOM THE DUDI IC
		EMS FROM THE PUBLIC
111	ere v	vere none.
7	DF	SPONSES TO PUBLIC COMMENTS
		ere no comments from the public, therefore, there were no responses.
111	cic w	ere no comments from the public, therefore, there were no responses.
Q	CO	NSENT AGENDA
0.		Staff Report on Finance
	a.	Sugj Report on Finance
	b.	Staff Report on Operations
	υ.	Stajj Keport on Operations
	c.	Staff Report on Ongoing Projects
	c.	Staff Report on Ongoing Projects
	d.	Staff Report on Wholesale Metering
	с.	stay Report on Whotesate Metering
	e.	Authorization to Increase Engineering Services Contract – Birdwood to Old Garth Raw
		Water Line Project – Kimley-Horn and Associates, Inc.
	f.	Authorization for an Amendment of Professional Services – Implementation of
	v	Computerized Maintenance Management System, GHD, Inc.
\mathbf{M}	r. Piı	nkston moved to approve the Consent Agenda. Ms. Mallek seconded the motion,
wł	iich j	passed unanimously (6-0).
		Connell asked how much of the total Rivanna to Ragged Waterline project would be
CO	nstru	cted with the Garth Road section.
		wyer responded it would be 1,200 feet of the line. He stated that it was from the south
		Route 250, would go under Route 250, the railroad tracks, Garth Road, and into the
-		y on the north side of Old Garth Road. He stated that they were working with the UVA
Fo	unda	tion (UVAF) to acquire the easements.
N/L	Ma	Halvasland if there was a timetable for the recetistions and whether they were making
		allek asked if there was a timetable for the negotiations and whether they were making
pro	ogres	5.
М	• Ма	wyer responded he believed they were making progress, though it had been slow. He
		ed that they obtained an easement from the Weedon Center and an office building on the
	-	e of the Weedon Center. He stated that they were working on easements from UVAF for
		stover property located north of Old Garth Road. He stated that the easement would
		e to Colthurst Drive. He stated that the Foundation had been provided with the most
23.		provided with the most

current documents, and they were awaiting a response.

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Ms. Mallek clarified that everything south of Route 250 had been acquired.

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- Mr. Mawyer responded the pipe had already been installed adjacent to Birdwood. He stated that
- there were more easements to obtain south of Birdwood through Fox Haven Farm. He noted the
- locations on a map where the easement still had to be obtained. He stated that they met with the
- owner of property near Albemarle High School, and they had a meeting scheduled in November
- to follow up with the owner. He stated that the owner had a horse farm and was concerned about
- the impact of the project on the horses.

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- Mr. Mawyer stated that they would construct about 18 miles of pipeline from the South Rivanna
- 151 Reservoir to Ragged Mountain Reservoir, to the Observatory WTP, and to Free Bridge via the
- 152 Central Water Line. He stated that pipeline would strengthen the urban water supply system and
- complete the Community Water Supply Plan.

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9. OTHER BUSINESS

- a. Presentation: Rivanna Conservation Alliance's Water Quality Monitoring and Restoration Efforts Lisa Wittenborn, Ph.D., Executive Director
- 158 Clair Sanderson, Ph.D., Monitoring Program Manager

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- Rivanna Conservation Alliance Executive Director Dr. Lisa Wittenborn introduced Dr. Clair
- Sanderson, stating that she was the newest employee and ran the water quality monitoring
- program. Dr. Wittenborn explained that the Rivanna Conservation Alliance (RCA) was formed
- in 2016 by the merger of two long-standing groups: Stream Watch and the Rivanna Conservation
- Society. She stated that while they had officially existed since 2016, they had worked in the
- watershed since 1990.

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- Dr. Wittenborn stated that the mission of the RCA was working with the community to conserve
- the Rivanna River and its tributaries through water quality monitoring, restoration, education,
- and advocacy.

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- Dr. Wittenborn stated that the Rivanna watershed was part of the Chesapeake Bay watershed.
- She stated that they were part of the solutions to cleaning up the Bay. She stated that within the
- Rivanna watershed were several municipalities—Albemarle, Fluvanna, Green, Orange, Louisa,
- and Charlottesville.

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- Dr. Sanderson reported that there were two main water quality monitoring programs—the
- bacteria monitoring program and the benthic macroinvertebrate biological monitoring program.
- She stated that they worked closely with the Virginia DEQ, and both programs had been certified
- by DEQ as Level III. She stated that a Level III certification meant the quality of the data
- collected by the programs was equivalent to the quality of the data collected by DEQ, and DEQ
- was able to use the programs' data as their own in the water quality decision-making processes.

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- Dr. Sanderson explained that the biological monitoring program involved volunteers sampling
- benthic macroinvertebrates, which were small organisms that lived at the bottom of streams. She

stated that they varied in pollution tolerances—mayfly and stonefly larvae were intolerant to pollution while blackfly and midge larvae were very tolerant. She stated that examining the number and diversity of bugs in the stream gave a good indication of water quality.

Dr. Sanderson stated that 50 sites around the Rivanna River watershed were sampled each spring and fall. She stated that they sampled at Moores Creek near Rolling Mills, downstream from the wastewater treatment plant. She stated that in 2021, the RCA conducted an analysis of long-term benthic trends, and both sites showed significant positive trends, with the stream health score increasing over time.

Dr. Sanderson stated that the RCA also had a bacteria monitoring program where volunteers tested for E. coli in the water and turbidity. She stated that there were 19 urban sites where samples were taken monthly from March through November. She stated that in 2022, they began a weekly monitoring program in the spring of eight sites.

Dr. Sanderson stated that the eight sites were where people potentially recreated in the streams and rivers. She stated that they were tested weekly to comply with the revised Virginia Water Quality standard, requiring 10 samples taken over a nine-month period to list or delist waters as impaired for bacteria.

Dr. Sanderson stated that they tested weekly in the summer from Memorial Day through Labor Day at three high-recreation sites along the Rivanna River—Darden Towe, Riverview Park, and Palmyra. She stated that all of the data collected was published on the website where it was available for people to see. She stated that the weekly summer bacteria data was additionally published on the James River Watch website and a swim guide app. She stated that the data was posted every Friday morning.

Dr. Sanderson stated that the monitoring data was used to identify pollution hotspots. She stated that in the past, the bacteria and benthic monitoring programs had indicated sewer leaks in different places within the greater Charlottesville area. She stated that they worked with the City and the County to rectify those issues.

Dr. Sanderson stated that the data was used to guide local water resource planning and protection efforts and to assist the DEQ and EPA with assessing water quality and identifying headwaters. She stated that the data had helped DEQ list over 175 miles of streams and rivers within the Rivanna watershed. She stated that the benthic macroinvertebrate data had helped DEQ delist Buck Island Creek.

Dr. Sanderson stated that the data was used to inform TMDL assessments and to evaluate the impact of water quality improvement efforts, such as those at Rolling Mills, Moores Creek, and further downstream.

Dr. Wittenborn stated that the new annual stream health report had been recently released. She stated that the recent stream health scores were contained in the report. She stated that they had been doing a lot of education programs. She stated that they had operated a 6th-grade watershed education program with Burley Middle School for five years, and they had been requested by the

ACPS to expand the program to all five schools in the spring.

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Dr. Wittenborn stated that the RCA owned property in Fluvanna County called the Shire Natural 233 Area—a 100-acre park open to the public with trails and ponds. She stated that stewards in 234 kayaks were on the navigable stretches of the river, including the drinking water reservoirs, to 235 monitor any issues or pollution problems.

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Dr. Wittenborn stated that a sonde was recently purchased and attached to a kayak. She explained that the sonde was geolocated, so as they paddled, they collected data on pH, dissolved oxygen, turbidity, conductivity, and temperature. She stated that the data was mapped.

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Dr. Wittenborn stated that the RCA did a lot of river cleanups. She stated that a cleanup with RWSA was done in 2019. She stated that they started a program in 2020 called the Rivanna River Roundup, an annual cleanup. She stated that the third event was held that year—they were in 21 different locations throughout the watershed, and 243 volunteers participated. She stated that they pulled 173 tires out of the river and streams.

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249 250 Dr. Wittenborn mentioned there were two restoration projects receiving more work. She stated that tree plantings had increased through a partnership with the James River Buffer Program. She stated that the tree plantings along streams and rivers were important for source water protection. She stated that in 2021, they planted nearly 3,000 trees in the Rivanna and Dunlora communities. She noted that they were careful to avoid buried utilities.

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Dr. Wittenborn stated that there was a restoration project in Riverview Park they were trying to get off the ground. She stated that the stream bank in Riverview was eroding, and the park was the only public access point to the river in the whole City. She stated that they proposed to restore about 600 feet of the bank in the park. She mentioned there was stormwater outfall from the Woolen Mills neighborhood coming into the park that was cutting back further—it cut 10 feet the past year.

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Dr. Wittenborn stated that they had already applied for state funding to help restore the side channel to prevent it from cutting back to the sewer line and make it safer. She stated that the erosion was dramatic and a public safety hazard. She stated that at the average rate of erosion, it would reach the line in less than 30 years. She stated that big storm events accelerated the process.

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268 269 Dr. Wittenborn stated that they had a planning grant to do preliminary engineering analysis and surveying work to determine what was feasible. She stated that they had been doing public engagement to figure out what people wanted to see in the park. She stated that they would apply for funding to implement the project in the spring.

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Dr. Wittenborn stated that the RCA was supported by about 100 trained volunteers, and it took a lot of supplies and materials to operate the lab and office and have the staff to make it happen.

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Mr. Pinkston asked what the funding model was.

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Dr. Wittenborn asked if Mr. Pinkston wanted to know the model for the organization or the monitoring program.

Mr. Pinkston stated that he wanted to know the model for the whole organization.

Dr. Wittenborn stated that there was a mix of funding. She noted that there was government support from the County, the City, and the Authority. She noted that there was grant funding and private donations, and they also performed contracted monitoring services.

Mr. Pinkston asked how many staff the RCA had.

Dr. Wittenborn stated that there were three full-time staff and two part-time staff.

Ms. Mallek clarified that if dangerous conditions were identified, then a red-flag warning would go up immediately. She noted that there was a lot of runoff from storms. She clarified that the ongoing monitoring levels were different than the emergency condition monitoring.

Dr. Wittenborn responded that they constantly shared the monitoring results with community partners when they received the data in real time. She stated that if they noticed an issue, such as a clear sewer leak, then they were immediately notifying the appropriate parties. She stated that they were often called in by local partners to investigate issues.

Mr. Mawyer mentioned there was a very complimentary article in the *Richmond Times Dispatch* on the work done by the RCA.

Ms. Andrea Bowles noted that there was good collaboration with the RCA. She stated that the data had greatly impacted the Authority; reports came before her for review, and they were beneficial. She mentioned that the Authority provided disposal for some of the E. coli samples.

Dr. Wittenborn mentioned Ms. Bowles was on the Science Advisory Committee for the RCA.

Mr. Mawyer stated that the Board had been supportive of the program with donations each year.

b. Presentation: Major Capital Projects Construction Update

Mr. Schiller stated that the intent of the Crozet wastewater equalization tank and pump station upgrade was to store wet weather flow, and they had completed a 1-million-gallon storage tank for that purpose. He stated that they replaced the third pump and added a fourth pump in the pump station. He stated that wastewater flow could be sent to the storage tank or down the line to adjacent pump stations.

Mr. Mawyer asked Mr. Schiller to provide an overview of Crozet wastewater being transported to Moores Creek.

Mr. Schiller stated that all the wastewater came into pump station 4, and there was a series of three additional pump stations that eventually brought the wastewater to the Moores Creek

interceptor. He stated that the equalization tank allowed up to 1 million gallons to be stored during a wet weather event to relieve capacity constraints and minimize sewer overflows.

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- Mr. Schiller stated that the project would be completed this month, with a total cost of \$5.4M.
- He clarified that it was an offline storage tank. He stated that the tank would run an automatic
- flushing sequence. He stated that there were four flush gates inside the tank, and they were filled
- with water on the backside, and after a draining sequence, each flush gate would be released
- 330 sequentially.

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- Mr. Schiller stated that there were four chambers in the bottom of the tank and depending on how long the flow had been in the tank, it may flush two or three times. He stated that the
- operations were done automatically. He showed a video of the tank flushing process.

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- Mr. Schiller stated that the next project was the Scottsville WTP lagoon liner replacement. He
- stated that the project intent was to replace two synthetic liners which had reached the end of
- their service lives. He stated that in addition to the liners, new draining devices were installed
- and they improved the ability to access the bottom of the lagoon, as well as improved the access
- road behind the plant down into the lagoons.

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- Mr. Schiller stated that the project was completed in August at a cost of \$540K, \$350K of which
- was provided through ARPA funding from Albemarle County.

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Mr. Pinkston asked what the liner membrane was made of.

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Mr. Schiller responded that it was a high-density polyethylene (HDPE).

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349 Mr. Pinkston asked how long the liners lasted.

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Mr. Schiller stated that the last liner was installed in 2007 or 2008, so about 15 years.

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353 Mr. Pinkston asked what they did with the water in the lagoons.

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- Mr. Schiller stated that the water was from backwash from water treatment filters, or if a basin
- had to be emptied, it was sent to the lagoons. After settling, the clear water is returned to Totier
- 357 Creek and the sludge is taken to Moores Creek for treatment.

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- Mr. Schiller stated that the Moores Creek lighting improvement project was to improve site
- lighting for safety purposes. He stated that they followed industrial facility lighting guidelines for
- the improvements and complied with County exterior lighting requirements.

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- Mr. Schiller stated that the lighting was done through the installation of full-cutoff fixtures which
- avoided light spray above the fixtures. He stated that some light fixtures were angled to avoid
- disturbing the surrounding area. He stated that prior, they used large spotlights to light the
- facility, and now, light was focused on the necessary areas. He stated that they were taking final
- light readings at the edge of the property to ensure they were in compliance with County
- requirements, and they would send a report to the County. He showed a video of the facility at

night.

Ms. Mallek asked if pictures would be taken from the neighborhoods for documentation purposes.

Mr. Schiller responded that they took pictures when the lighting was installed.

Mr. Schiller stated that the next project was the Moores Creek clarifiers and lime silo demolition project. He stated that the two clarifiers were open vessels in poor condition and there were safety concerns, so they were demolished. He stated that the concrete related to the tanks had been removed, so there was no remaining foundation—only compacted fill.

Mr. Schiller stated that the lime silo and adjacent electrical building had been removed. He stated that the project was completed in July at a cost of \$790K. He stated that there was a project to install a third pump and a new VFD at the Glenmore Water Resource Recovery Facility to increase capacity, and a new exhaust fan was also installed to improve ventilation. He stated that the project was completed in September at a cost of \$370K.

Mr. Mawyer asked Mr. Schiller to explain what a VFD was.

Mr. Schiller responded that a VFD was a variable frequency drive that enabled the speed of the pump to be changed.

Mr. Schiller stated that the Observatory and South Rivanna WTP renovation project was under construction. He stated that the project was to increase the Observatory capacity from 7.7 MGD to 10 MGD and to increase the reliability of South Rivanna to treat 12 MGD. He stated that two filters would be installed at South Rivanna, alum and fluoride storage would be improved, and several improvements would be done to the sedimentation basins.

 Mr. Schiller noted that a new administration building had been constructed at the South Rivanna WTP for the water department. He stated that an enclosure was built around the liquid lime storage tanks. He stated that improvements were made to the raw water and sludge pumps. He stated that the facility was ready to provide 12 MGD capacity. He stated that they were preparing to go into a long-term shutdown of the Observatory WTP to facilitate improvements.

Mr. Schiller stated that at the Observatory WTP they were planning a new chemical building, plate settlers, and sedimentation basins improvements. He stated that they would expand from two to six GAC vessels along with other improvements. He stated that the new chemical building was a multilevel facility that would have storage on both levels.

Mr. Schiller explained that the plate settlers sped up the settling process of solids in the sedimentation basins. He stated that they could get 10 MGD capacity per sedimentation basin, so 20 MGD total. He stated that they would demolish basins 1 and 3 to allow for future expansion of the facility.

Mr. Schiller stated that the Observatory WTP shutdown was planned for December 5 through

March 5. He stated that work would be done that would best take place while the facility was nonoperational.

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- Mr. Schiller mentioned the Airport Road pump station and piping project. He stated that the
- project was to provide a reliable connection between the urban pressure zone and the Piney
- Mountain north pressure zone. He stated that the pressure zone was fed by the North Rivanna
- 421 treatment plant.

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- Mr. Schiller stated that the new pump station would take the place of the temporary pump used
- near Kohls. He stated that the new finished water pump station would allow the North Rivanna
- WTP to be decommissioned. He stated that it would eventually be part of the Airport Pressure
- Zone, though there was no timeline for the development of the zone.

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- Mr. Schiller noted the installation of the water line through the Hollymead Town Center. He
- stated that there was a poly-wrap that went around the pipes to protect them from corrosive soils.
- He stated that the project would be completed by December 2023 with a cost of \$10M.

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- Mr. Schiller noted the Moores Creek 5 kV electrical system upgrade. He stated that the upgrade
- 433 would replace some of the major electrical components. He stated that many of the components
- were from the 1970s or 1980s. He stated that it included control centers, large transformers, and
- switchgear. He stated that they had issued the notice to proceed to the contractor in May, but
- there had been no site activity because of long lead times for the large electrical devices. They
- anticipated the project would be completed by June 2024 at a cost of \$5M.

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- Mr. Schiller stated that he would cover projects in the design phase. He noted that the second
- South Rivanna River crossing was being done for redundancy and reliability purposes to ensure
- water could be transported from the main urban zone to the northern urban zone and eventually
- to the Piney Mountain zone.

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- Mr. Schiller noted the locations of surrounding structures of the South Rivanna WTP. He stated
- that they underwent a series of alignment options, and they selected a horizontal directional drill
- (HDD) crossing beneath the river. He stated that they were moving design forward and acquiring
- easements when necessary.

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- Mr. Mawyer stated that they had to dig a pit on both sides of the river and drill the pipe
- 450 underneath it.

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Mr. Pinkston asked how far below the river the pipe would be laid.

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- Mr. Schiller stated that they anticipated drilling 40 feet under the base of the river. He stated that
- the pipe would be joined above ground and then fed through the drilled hole.

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- Ms. Mallek asked if the project was located where there was vehicle parking between Berkmar
- Drive and the high-pressure water tank.

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Mr. Schiller stated that he believed it was likely the airport pump station at the end of Berkmar

Drive. 461 462 Ms. Mallek stated that it was south. 463 464 465 Mr. Schiller stated that site was for a different project. He stated that they were moving forward with design and easements, and they expected the river crossing project to be completed by 2024 466 at a cost of \$7M. 467 468 Mr. Schiller stated that the South Rivanna to Ragged Mountain/Birdwood to Old Garth project 469 was a portion of the transfer line being installed ahead of private development. He stated that 470 471 they wanted to ensure the pipeline disturbance was done before the development work. 472 Mr. Schiller stated that they were working through permitting and easement needs. He stated that 473 they had reached about 90% design. He noted that they had to bore under Route 250 and the 474 railroad, so the permitting was extensive. He stated that it was expected to be completed by 2024 475 with a budget of \$4M. 476 477 Mr. Mawyer asked if there would be impacts to traffic on Route 250. 478 479 480 Mr. Schiller responded there should not be traffic impacts other than vehicles using the construction entrance. 481 482 Mr. Mawyer stated that they would dig pits on both sides of Rt. 250 and bore beneath it. He 483 stated that a similar process would be done to go under the railroad. He stated that the technique 484 was called jack and bore. 485 486 Mr. Schiller explained that there was a receiving pit and sending pit, and the pipe was jacked 487 through a hole bored in the ground. 488 489 Ms. Mallek clarified that the pipe would be laid out on the send side before jacking it through the 490 491 hole. 492 493 Mr. Schiller stated that was more the case with the HDD. He explained that individual pipe sections could be added for the jack and bore technique. 494 495 496 Mr. Schiller noted the Beaver Creek Dam pump station and piping modification project. He 497 stated that the project would update the spillway of the dam to meet Virginia Department of Conservation and Recreation dam safety standards. He stated that the type of spillway proposed 498 499 was a concrete labyrinth structure. He stated that the spillway design would require the relocation of the existing raw water pump station. He stated that they had selected the site for the 500 new pump station on the west side of the reservoir, and there would be a new raw water line 501 from the new pump station to the Crozet WTP. 502 503 Mr. Schiller stated that they were working through the NRCS funding process. He stated that 504 505 they had submitted the supplemental watershed plan and environmental assessment document.

He stated that the documents indicated the intention of the Authority to apply for design funds.

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- He stated that the NRCS had accepted what was submitted, and they hoped for the process to be completed by the end of January.

 Ms. Mallek asked if approval of the application with NRCS was implied and whether the Authority was still eligible for the funding.
- Mr. Schiller stated that was correct. He stated that they would hear from stakeholders and the public and then they would proceed into the final round of design comments.
- Mr. Mawyer mentioned that NRCS awarded the Authority a \$400K grant to perform the preliminary design and early assessments. He stated that the NRCS was working positively with the Authority, so they had high expectations for approval of design and construction grants.
- Mr. Schiller stated that they looked for the overall project to be completed by 2027 with a budget of \$43M.
- Mr. Schiller responded that an application for approval of design funding would be made by the end of January, with any approval several months later. He stated that they would have to submit

a request for additional construction funding as part of the grant process.

Mr. O'Connell asked if they knew when they would receive the grant.

- Mr. Mawyer clarified that they would have to apply for construction funding after the design had been completed in 2024.
- Ms. Whitaker explained that NRCS had a pay-as-you-go program, so the NRCS awarded funding for planning as the Authority was doing planning, and when it began design, they would enter into an agreement. She stated that as long as NRCS approved the project and had funds available, they would fund the design and commit to paying for construction.
- Mr. Pinkston asked what NRCS stood for.

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- Mr. Mawyer responded it was the Natural Resources Conservation Service within the federal
 Department of Agriculture. He stated that they hoped to receive about \$17 M for the Beaver
 Creek project.
- Ms. Mallek stated that they may need support to ensure there was still funding available when it came time for construction.
- Mr. Schiller stated that the process to determine available funding was complicated. He stated that there were several categories, and there were percentages that applied to each category according to the total project cost.
- Mr. Rogers asked if the project would be 100% federally funded.
- Mr. Schiller responded it would not.

Mr. Rogers asked what the percentage would be.

556 Mr. Schiller stated that it was complicated. He stated that the funds would amount to 65% of the total applicable project costs. He stated that it was still to be determined what components of the project were applicable.

Mr. Mawyer mentioned the NRCS would review the dam modifications, temporary road, pump station, and the pipe to the Crozet WTP and decide which components of the project were eligible for funding. He stated that the project would require no funding from the City. It would be funded by the federal programs and ACSA.

Mr. O'Connell asked if they would change what was in the upcoming CIP because it included funding 100% of the project by ACSA.

Mr. Mawyer stated that they would include a scenario in the draft CIP in which they assumed they would receive the grant funding and one in which they did not get the funding.

Mr. Schiller mentioned the Ragged Mountain Reservoir to Observatory WTP pump station and waterline. He stated that the project was part of the overall raw water transfer system, and it would increase the conveyance capacity to make use of the 10MGD capacity at the WTP. He stated that there were currently two pump stations—a 40-year-old one and a 70-year-old one. He stated that there were also two raw water transfer lines—a 70-year-old line and a 110-year-old line.

Mr. Schiller stated that the aging infrastructure would be replaced with a new waterline and pump station. He noted that it was a complicated design because it would be used to transfer water from Ragged to Observatory in the short term, and it would be also used to send water from Ragged to South Rivanna WTP as part of the raw water transfer process.

Mr. Schiller stated that the design engineers had worked hard to better understand the basic design and layout of the pump station.

Mr. Pinkston clarified that the waterline to be replaced was the one that was visible on the surface of the ground in several locations from Reservoir Road.

Mr. Mawyer stated that was correct.

Mr. Pinkston asked if the pump station would be across from the Fontaine Research Park.

Mr. Schiller responded the pump station would be off Reservoir Road on Fox Haven Farm.

Mr. Mawyer responded that the existing pump station was near Fontaine Avenue, but it would be removed.

Mr. Schiller affirmed that the Royal Pump Station was near Fontaine Avenue.

Mr. Pinkston clarified that water could come in from the reservoir and be directed to several destinations.

Mr. Schiller responded that this was correct. He stated that they would install the pumps in phases—currently, the pumps were needed to convey water from Ragged Mountain to Observatory WTP. He stated that once the whole piping system was in place, the pumps could also convey water from Ragged Mountain to South Rivanna WTP.

Mr. Schiller stated that there would be a series of automatic control valves to determine where the flow was directed. He stated that the engineers underwent a complicated design process to ensure all hydraulic conditions were accounted for.

Ms. Mallek asked if the pumps were bidirectional.

Mr. Schiller explained that the piping would be set up so that the flow was always in the correct direction. He stated that they were working through the final site acquisition process with the Foundation for the pump station and working through final easements. He stated that they were in the process of refining the pump station design. He stated that the project was expected to be completed in 2028 at a budget of \$44M.

Mr. Schiller stated that there was a lot of recent work associated with the Central Waterline. He noted the selected alignment for the Southern Route or Cherry Avenue Route. He stated that since it had been selected, they were working through surveys and the design process. He stated that the project was intended to improve waterflow pressure and redundancy in the urban system and to connect the Observatory WTP better hydraulically with the central and eastern portions of the urban transmission system.

Mr. Schiller stated that they anticipated the project would be completed by 2028 with a budget of \$41M. He mentioned the Red Hill WTP was previously used as a wellhouse and was now used as a WTP. He stated that they had a number of vessels—calcite contactors and various chemicals stored in the building. He stated that they performed a needs assessment to determine more space was needed.

Mr. Schiller stated that they intended to add on to the facility to improve the monitoring and chemical automation processes. He stated that the design was underway, and they expected the project to be completed in 2023 with a budget of \$450K. He noted that \$400K was received from the County's ARPA funding.

638 Mr. O'Connell asked if the tank would change.

Mr. Schiller responded it would not. He stated that everything would remain the same, except the location of where the chemicals were stored, and it would improve the ability to monitor the treatment process through our SCADA system.

Mr. Schiller stated that there were several projects underway at the Moores Creek facility. He

stated that there was an expansion and rehabilitation of the building known as the Engineering and Administration Building project. He stated that there was rehabilitation of the gas sphere associated with the sustainable digester gas process, and there was a continuation of the aluminum slide gate replacement project at the Moores Creek pump station and headworks, and the UV disinfection facility. He mentioned that there was also rehabilitation of the compost shed roof.

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Mr. Schiller mentioned that there were operations and maintenance building upfits. He stated that there were cogeneration system upgrades. He noted that there were planned structural modifications and concrete repairs. He stated that the work was associated with the equalization basins and holding ponds, and there were improvements for the pump station catwalk. He stated that there would be valve replacements and digester repairs. He stated that they were ensuring the digesters could remain in operation for 10 to 15 years before replacement was required.

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Mr. Schiller stated that there would be gravity sludge thickener pumping and chemical feeding improvements. He stated that altogether, the cost for projects at Moores Creek was about \$31M. He stated that each one was at a different stage of design, but all were intended to be completed by 2027.

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Mr. Mawyer stated that they were drafting the CIP for FY 24 - 28. He noted that the prior year five-year CIP was \$200M, and the first draft of the updated CIP was \$350M. He stated they had to reprioritize and integrate the needs with the finances to develop a reasonable plan.

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Mr. Mawyer stated that the proposed CIP would be brought before the Board in February. He stated that the operating budget would be presented in March, and there would be public hearings and approval in May 2023.

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Ms. Mallek mentioned power backups and asked if there would be backup power for the flow equalization station in Crozet.

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Mr. Schiller explained that it would be powered by the existing generator. He stated that the generator was appropriately sized for all of the features.

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Mr. Mawyer stated that as storms were forecast, they filled all of the fuel storage tanks so they could maintain service during storms.

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Ms. Mallek noted that the derecho was 10 days.

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683 Mr. Schiller stated that they typically looked for 72 hours of storage for fuel.

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Mr. Mawyer stated that it was part of an optimization they worked on to add chemical capacity and diesel fuel storage capacity. He stated that they were able to operate in emergency conditions for quite a while.

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Mr. Tungate noted that they were able to deliver fuel to all of our generators during the derecho though the road to Crozet raw water pump station was blocked.

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692	Mr. Mawyer stated that Ms. Victoria Fort was back from leave, and she was one of the senior
693	project engineers.
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695	10. OTHER ITEMS FROM BOARD/STAFF NOT ON THE AGENDA
696	There were no items to discuss.
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698	11. CLOSED MEETING
699	There was no reason for a closed meeting.
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701	12. ADJOURNMENT
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703	At 3:22 p.m., Mr. Pinkston moved to adjourn the meeting of the Rivanna Water and Sewer
704	Authority. Ms. Hildebrand seconded the motion, which passed unanimously (6-0).

MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY

BOARD OF DIRECTORS

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: EXECUTIVE DIRECTOR'S REPORT

DATE: NOVEMBER 15, 2022

STRATEGIC PLAN GOAL: WORKFORCE DEVELOPMENT

Recognitions

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

- ➤ Alison Henry Class 2 Water Operator
- Dennis Barbieri Class 2 Wastewater Operator

Employee Appreciation Day, November 2, 2022

The management teams of our Authorities passed on our thanks to staff for their dedicated support of our services with a picnic and Service Awards program in the Administration Building parking lot.



New Employee Welcoming Program Restarted

➤ I had a "meet and greet" luncheon with several of our newest employees to welcome them to our team in November. This effort to get to know our new employees began before the pandemic, but had been paused since 2020.

STRATEGIC PLAN GOAL: COMMUNICATION AND COLLABORATION

Representation on State Organizations



VIRGINIA WATER & WASTE AUTHORITIES ASSOCIATION

The mission and goals of the Virginia Water & Waste Authorities Association are to promote and defend the interests of Virginia's water and waste authorities. The VWWAA held a special election on October 20th to elect new officers. Congratulations to the newly elected Officers:

Ben Shoemaker-President Fauquier Co Water & Sanitation Authority

Bill Mawyer – 1st Vice President *Rivanna Water & Sewer Authority*

Eric Lawrence – 2nd Vice President

Frederick Water

Alton Echols – Treasurer Loudoun Water

STRATEGIC PLAN GOAL: INFRASTRUCTURE AND MASTER PLANNING

Observatory WTP Renovation

We are preparing for a shutdown of the OBWTP from December 5 – March 5, 2023 to complete the renovation and treatment capacity increase from 7.7 to 10 mgd. The South Rivanna WTP will serve the Urban Water System (City and adjacent areas of the County) during this period.

Other Major Projects

- 1. We continue to work with UVA, UVAF, and 1 private property owner to acquire final easements on the following major water piping projects:
 - ➤ S. Rivanna to Ragged Mtn Reservoir Water Pipe: 8 miles of 36" pipe
 - Ragged Mtn Reservoir to Observatory WTP Water Pipe and Pump Station: 5 miles of 36" pipe
- 2. Information has been forwarded to Albemarle County for the Schenks Branch sewer pipe replacement project and easement along McIntire Road.





MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY

BOARD OF DIRECTORS

FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND

ADMINISTRATION

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: SEPTEMBER MONTHLY FINANCIAL SUMMARY – FY 2023

DATE: NOVEMBER 15, 2022

Financial Snapshot

September ended with an overall net deficit of \$104,000. Operating rate revenues for the first quarter are above average, and we received the annual payment from the County for the septage receiving support agreement. However, operating expenses are currently over the prorated annual budget. Total revenues are \$760,000 over budget estimates, and expenses are \$716,000 over budget as well. Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
Operations				
Revenues	\$ 2,608,807	\$ 2,675,000	\$ 651,687	\$ 5,935,494
Expenses	(2,758,566)	(2,720,047)	(666,731)	(6,145,344)
Surplus (deficit)	\$ (149,759)	\$ (45,047)	\$ (15,044)	\$ (209,850)
Debt Service				
Revenues	\$ 2,138,070	\$ 2,393,413	\$ 591,623	\$ 5,123,106
Expenses	(2,128,725)	(2,299,138)	(589,472)	(5,017,335)
Surplus (deficit)	\$ 9,345	\$ 94,275	\$ 2,151	\$ 105,771
Total				
Revenues	\$ 4,746,877	\$ 5,068,413	\$ 1,243,310	\$ 11,058,600
Expenses	(4,887,291)	(5,019,185)	(1,256,203)	(11,162,679)
Surplus (deficit)	\$ (140,414)	\$ 49,228	\$ (12,893)	\$ (104,079)

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

Detailed Financials

The Authority's actual operating revenues through September are \$561,800 over the prorated annual budget estimates, and operating expenses exceed budget by \$623,500. The following comments help explain most of the other budget vs. actual variances.

- A. Annual and Quarterly Transactions Some revenues and expenses are over the prorated year-to-date budget due to one-time receipts of revenues for the year and quarterly or annual payments of expenses. These transactions appear to be significant impacts on the budget vs. actual monthly comparisons but usually even out as the year progresses. Septage receiving support revenue of \$109,440 is billed to the County annually in July. Annual payments are made 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 Water and Wastewater rate center salaries are higher than budget due to pay increases for plant operators who achieved higher licenses.
- C. Professional Services (Urban Water, Urban Wastewater pages 2, 5) Urban Water and Urban Wastewater are over the prorated budget for engineering and technical services for various surveys and studies.
- D. Other Services & Charges (Urban Water, Urban Wastewater, Administration pages 2, 5,
 8) Urban Water paid some annual watershed management costs, as budgeted. Urban Wastewater's permits and fees are running higher than originally estimated. The Administration paid is currently over the prorated budget on strategic plan consulting costs.
- E. Information Technology (Urban Water, Administration pages 2, 8) Urban Water incurred some unbudgeted computer hardware and software purchases. The Administration department has spent \$24,000 more than its annual budget for computer hardware and software purchases. Administration also paid some annual maintenance and license fees similar to those noted in A. above.
- F. Communication (Administration page 8) The Administration department switched to a new telephone system which was not included in the budget.
- G. Operations and Maintenance (Urban Water, Urban Wastewater pages 2, 5) Urban Water is \$139,000 over the prorated annual budget for Chemicals, which was primarily due to the purchase of a carbon exchange in September for \$102,400, but that was funded by GAC Reserves, as budgeted. Urban Water made its \$175,000 annual lease payment to UVA for the Observatory facility in August. (See Note A.) Urban Wastewater paid \$86,000 for an annual equipment maintenance contract, and its chemical costs are running higher than originally estimated.

Rivanna Water & Sewer Authority Monthly Financial Statements - September 2022 Fiscal Year 2023

Consolidated Revenues and Expenses Summar	<u>v</u>		Budget FY 2023	Υє	Budget ear-to-Date	Y	Actual ear-to-Date	١	Budget /s. Actual	Variance Percentage
Operating Budget vs. Actual										
	Notes									
Revenues										
Operations Rate Revenue		\$	20,614,425	\$	5,153,606	\$	5,578,801	\$	425,195	8.25%
Lease Revenue Admin., Maint. & Engineering Revenue			85,000 656,000		21,250 164,000		34,183 164,240		12,933 240	60.86% 0.15%
Other Revenues			639,036		159,759		200,639		40.880	25.59%
Use of Reserves-GAC	G		150,000		37,500		102,400		64,900	173.07%
Interest Allocation			7,170		1,793		19,472		17,679	986.30%
Total Operating Revenues		\$	22,151,631	\$	5,537,908	\$	6,099,734	\$	561,826	10.15%
Expenses										
Personnel Cost	A, B	\$	10,494,727	\$	2,771,851	\$	2,799,165	\$	(27,314)	-0.99%
Professional Services	Ć	·	629,900	·	157,475		187,192	·	(29,717)	-18.87%
Other Services & Charges	A, D		3,427,460		856,865		887,951		(31,086)	-3.63%
Communications	F		200,342		50,086		71,125		(21,039)	-42.01%
Information Technology	A, E		816,626		204,157		450,851		(246,695)	-120.84%
Supplies Operations & Maintenance	A, G		39,950 5,222,531		9,988 1,305,633		10,041 1,615,998		(53)	-0.53% -23.77%
Equipment Purchases	A, G		420,100		105,025		62,262		(310,365) 42,763	-23.77% 40.72%
Depreciation			900,000		225,000		225,000		-12,700	0.00%
Total Operating Expenses		\$	22,151,636	\$	5,686,078	\$	6,309,585	\$	(623,507)	-10.97%
Operating Surplus/(Deficit)		\$	(5)	\$	(148,170)	\$	(209,850)	:		
Debt Service Budget vs. Actual										
Revenues										
Debt Service Rate Revenue		\$	19,522,929	\$	4,880,732	\$	4,880,733	\$	1	0.00%
Septage Receiving Support - County	Α		109,440		27,360		109,440		82,080	300.00%
Buck Mountain Lease Revenue			1,600		400		1,480		1,080	269.89%
Trust Fund Interest			990		248		22,859		22,611	9135.88%
Reserve Fund Interest Total Debt Service Revenues		\$	64,230 19,699,189	\$	16,058 4,924,797	\$	108,595 5,123,106	\$	92,538 198,309	576.29% 4.03%
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Debt Service Costs			10 10= = : :	_	4044 = ::	_	4644 = ++			
Total Principal & Interest		\$	16,165,241	\$	4,041,310	\$	4,041,310	\$	(00.500)	0.00%
Reserve Additions-Interest Debt Service Ratio Charge			64,230 725,000		16,058 181,250		108,595 181,250		(92,538)	-576.29% 0.00%
Reserve Additions-CIP Growth			2,744,717		686,179		686,179		-	0.00%
Total Debt Service Costs		\$	19,699,188	\$	4,924,797	\$	5,017,335	\$	(92,538)	-1.88%
Debt Service Surplus/(Deficit)		\$	1	\$	0	\$	105,772		•	
			Summar	у						
Total Revenues		\$	41,850,820	\$	10,462,705	\$	11,222,841	¢	760,136	7.27%
Total Revenues Total Expenses Surplus/(Deficit)		\$	41,850,824 (4)	·	10,462,765 10,610,875 (148,170)		11,326,919 (104,079)	Ψ :	(716,044)	-6.75%

<u>Urban Water Rate Center</u> Revenues and Expenses Summary			Budget FY 2023	Ye	Budget ear-to-Date	١	Actual Year-to-Date	V	Budget /s. Actual	Variance Percentage
Operating Budget vs. Actual	Notes									
Revenues	Notes									
Operations Rate Revenue		\$	9,014,863	\$	2,253,716	\$	2,472,039	\$	218,323	9.69%
Lease Revenue			60,000		15,000		26,307		11,307	75.38%
Miscellaneous Use of Reserves-GAC	G		- 150,000		37,500		102,400		64,900	173.07%
Interest Allocation	G		3,000		750		8,061		7,311	974.85%
Total Operating Revenues		\$	9,227,863	\$	2,306,966	\$	2,608,807	\$	301,842	13.08%
Expenses										
Personnel Cost	В	\$	2,234,714	\$	587,963	\$	586,024	\$	1,939	0.33%
Professional Services	С		222,000		55,500		97,674		(42,174)	-75.99%
Other Services & Charges			716,300		179,075		189,682		(10,607)	-5.92%
Communications			100,920		25,230		29,829		(4,599)	-18.23%
Information Technology	A, E		104,950		26,238		67,972 1,883		(41,734) (533)	-159.06% -39.48%
Supplies Operations & Maintenance	A, G		5,400 2,511,396		1,350 627,849		857,074		(533) (229,225)	-39.48% -36.51%
Equipment Purchases	۸, ٥		16,000		4,000		5,230		(1,230)	-30.74%
Depreciation			300,000		75,000		75,000		-	0.00%
Subtotal Before Allocations		\$, ,	\$	1,582,205	\$		\$	(328,164)	-20.74%
Allocation of Support Departments		_	3,016,183		791,575		848,198		(56,624)	-7.15%
Total Operating Expenses		\$	9,227,863	\$	2,373,780	\$	2,758,567	\$	(384,787)	-16.21%
Operating Surplus/(Deficit)		\$	(0)	\$	(66,814)	\$	(149,759)			
Debt Service Budget vs. Actual										
Revenues										
Debt Service Rate Revenue		\$	8,302,224	\$	2,075,556	\$	2,075,556	\$.	0.00%
Trust Fund Interest			400		100		8,366		8,266	8266.32%
Reserve Fund Interest Lease Revenue			31,000 1,600		7,750 400		52,669 1,480		44,919	579.59% 269.89%
Total Debt Service Revenues		\$	8,335,224	\$	2,083,806	\$	2,138,070	\$	1,080 54,264	2.60%
rotal Basic Gol vice November			0,000,221	<u> </u>	_,000,000		2,100,010	<u> </u>	0.,20.	2.00 /0
Debt Service Costs										
Total Principal & Interest		\$	6,964,724	\$	1,741,181	\$	1,741,181	\$. .	0.00%
Reserve Additions-Interest			31,000		7,750		52,669		(44,919)	-579.59%
Debt Service Ratio Charge Reserve Additions-CIP Growth			400,000 939,500		100,000 234,875	\$	100,000 234,875		-	0.00% 0.00%
Total Debt Service Costs		\$	8,335,224	\$	2,083,806	<u>φ</u>	2,128,725	\$	(44,919)	-2.16%
Debt Service Surplus/(Deficit)		\$	-	\$	_,000,000	\$	9,346		(, ,	
		Pa	ite Center S	lun	nmary					
		No	ite Center 3	Juli	iiiiai y					
Total Revenues Total Expenses		\$	17,563,087 17,563,087	\$	4,390,772 4,457,586	\$	4,746,878 4,887,291	\$	356,106 (429,706)	8.11% -9.64%
Surplus/(Deficit)		\$	(0)	\$	(66,814)	\$	(140,414)			
Costs per 1000 Gallons Operating and DS		\$	2.72 5.17			\$	2.96 5.25			
Thousand Gallons Treated or			3,397,700		849,425		931,790		82,365	9.70%
Flow (MGD)			9.309				10.128			

<u>Crozet Water Rate Center</u> Revenues and Expenses Summary			Budget FY 2023		Budget ear-to-Date		Actual ear-to-Date		Budget s. Actual	Variance Percentage
Operating Budget vs. Actual										
_	Notes									
Revenues		•	4 407 004	•	000 074	•	000 074	•		0.000/
Operations Rate Revenue Lease Revenues		\$	1,197,084	\$	299,271 6,250	\$	299,271	\$	1,625	0.00% 26.01%
Interest Allocation			25,000 400		100		7,875 1,090		990	990.42%
Total Operating Revenues		\$	1.222.484	\$	305,621	\$	308,237	\$	2,616	0.86%
•		<u> </u>	.,==,	*		*		<u> </u>		0.0070
Expenses		•	050 550	•	00.700	•	00.007	•	(454)	0.400/
Personnel Cost		\$	352,559	\$	92,783	\$	93,237	\$	(454)	-0.49%
Professional Services Other Services & Charges			22,900 118,700		5,725 29,675		1,968 25,845		3,757 3,830	65.63% 12.91%
Communications			17,600		4,400		5,565		(1,165)	-26.47%
Information Technology			4,950		1,238		1,952		(715)	-57.76%
Supplies			1,500		375		483		(108)	-28.73%
Operations & Maintenance			358,500		89,625		74,588		15,037	16.78%
Equipment Purchases			3,000		750		750		10,007	0.00%
Depreciation			60,000		15.000		15,000		_	0.00%
Subtotal Before Allocations		\$	939,709	\$	239,571	\$	219,388	\$	20,183	8.42%
Allocation of Support Departments		Ψ	282,780	Ψ	74,193	Ψ	79,215	Ψ	(5,022)	-6.77%
Total Operating Expenses		\$	1,222,489	\$	313,764	\$	298,603	\$	15,161	4.83%
Operating Surplus/(Deficit)		\$	(5)		(8,143)		9,634		-, -	
					-					
Debt Service Budget vs. Actual										
Davianuas										
Revenues		_		_		_		_		/
Debt Service Rate Revenue		\$	2,161,704	\$	540,426	\$	540,426	\$	-	0.00%
Trust Fund Interest			80		20		1,943		1,923	9614.95%
Reserve Fund Interest		_	1,200	•	300	•	2,063	•	1,763	587.76%
Total Debt Service Revenues		\$	2,162,984	\$	540,746	\$	544,432	\$	3,686	0.68%
Debt Service Costs										
Total Principal & Interest		\$	1,217,280	\$	304,320	\$	304,320	\$	_	0.00%
Reserve Additions-Interest		Ψ	1,217,200	Ψ	304,320	Ψ	2,063	Ψ	(1,763)	-587.76%
Reserve Additions-CIP Growth			944,500		236,125		236,125		(1,700)	0.00%
Total Debt Service Costs		\$	2,162,980	\$	540,745	\$	542,508	\$	(1,763)	-0.33%
Debt Service Surplus/(Deficit)		\$	4	\$	1	\$	1,924		(1,111)	
. , ,							· · · · · · · · · · · · · · · · · · ·	=		
	R	ate	Center Su	mm	arv					
					<u> </u>					
Total Revenues		\$	3,385,468	\$	846,367	\$	852,669	\$	6,302	0.74%
Total Expenses		Ψ	3,385,469	Ψ	854,509	Ψ	841,111	Ψ	13,398	1.57%
Total Expenses			3,303,409		004,009		041,111	_	10,000	1.57 /0
Surplus/(Deficit)		\$	(1)	\$	(8,142)	\$	11,558	=		
044000 0.11		•	0.00			Φ.	5.00			
Costs per 1000 Gallons		\$	6.03			\$	5.02			
Operating and DS		\$	16.70			\$	14.15			
Thousand Gallons Treated			202,697		50,674		59,430		8,756	17.28%
			,		,		,		,	
Flow (MGD)			0.555				0.646			

<u>Scottsville Water Rate Center</u> Revenues and Expenses Summary		Budget FY 2023			Budget ar-to-Date	Actual Year-to-Date			Budget s. Actual	Variance Percentage
Operating Budget vs. Actual										
	Notes									
Revenues										
Operations Rate Revenue		\$	569,556	\$	142,389	\$	142,389	\$	-	0.00%
Interest Allocation		_	200		50		506		456	912.56%
Total Operating Revenues		\$	569,756	\$	142,439	\$	142,895	\$	456	0.32%
Expenses										
Personnel Cost		\$	212,797	\$	56,052	\$	56,832	\$	(779)	-1.39%
Professional Services			5,000		1,250		2,517		(1,267)	-101.38%
Other Services & Charges			27,100		6,775		7,370		(595)	-8.79%
Communications			6,400		1,600		1,638		(38)	-2.36%
Information Technology Supplies			4,400 100		1,100 25		526 138		574 (113)	52.16% -450.08%
Operations & Maintenance			97,925		25 24,481		26,408		(1,927)	-450.06% -7.87%
Equipment Purchases			1,600		400		20,406		(1,927)	-7.07% -64.35%
Depreciation			40,000		10,000		10,000		0	0.00%
Subtotal Before Allocations		\$	395,322	\$	101,683	\$	106,086	\$	(4,402)	-4.33%
Allocation of Support Departments		·	174,433	·	45,718	•	47,663	·	(1,945)	-4.25%
Total Operating Expenses		\$	569,755	\$	147,401	\$	153,749	\$	(6,347)	-4.31%
Operating Surplus/(Deficit)		\$ \$	1	\$	(4,962)	\$	(10,853)			
Revenues Debt Service Rate Revenue Trust Fund Interest Reserve Fund Interest		\$	150,300 10 850	\$	37,575 3 213	\$	37,575 206 1,412	\$	- 203 1,199	0.00% 8129.20% 564.33%
Total Debt Service Revenues		\$	151,160	\$	37,790	\$	39,192	\$	1,402	3.71%
			,		,		•		•	
Debt Service Costs										
Total Principal & Interest		\$	148,726	\$	37,182	\$	37,182	\$	-	0.00%
Reserve Additions-Interest			850		213		1,412		(1,199)	
Reserve Additions-CIP Growth		_	1,589		397	\$	397			
Total Debt Service Costs		<u>\$</u> \$	151,165 (5)	<u>\$</u> \$	37,791 (1)	<u>\$</u> \$	38,990 202	\$	(1,199)	-3.17%
Debt Service Surplus/(Deficit)		-	(5)	Ą	(1)	φ	202			
	R	Rate	Center Su	mm	nary					
					-			_		
Total Revenues		\$	720,916	\$	180,229	\$	182,088	\$	1,859	1.03%
Total Expenses			720,920		185,193		192,739		(7,546)	-4.07%
Surplus/(Deficit)		\$	(4)	\$	(4,964)	\$	(10,651)	3		
Costs per 1000 Gallons		Ф	33.07			¢	25.70			
Operating and DS		\$ \$	33.07 41.84			\$ \$	25.70 32.22			
Operating and Do		Ψ	71.04			Ψ	JZ.ZZ			
Thousand Gallons Treated			17,230		4,308		5,982		1,675	38.87%
or Flow (MGD)			0.047				0.065			
(3.5 17							

<u>Urban Wastewater Rate Center</u> Revenues and Expenses Summary			Budget FY 2023	Y	Budget ear-to-Date	Y	Actual ear-to-Date	,	Budget vs. Actual	Variance Percentage
Operating Budget vs. Actual										
Revenues	Notes									
Operations Rate Revenue		\$	9,033,662	\$	2,258,416	\$	2,465,287	\$	206,871	9.16%
Stone Robinson WWTP			39,036		9,759		4,598		(5,161)	-52.89%
Septage Acceptance			500,000		125,000		156,913		31,913	25.53%
Nutrient Credits			100,000		25,000		39,129		14,129	56.51%
Miscellaneous Revenue Interest Allocation			3,300		825		9,074		8,249	999.86%
Total Operating Revenues		\$	9,675,998	\$	2,419,000	\$	2,675,000	\$	256,000	10.58%
• •			0,0.0,000	<u> </u>		<u> </u>	_,0:0,000	<u> </u>		10.0070
Expenses	4 B	Φ.	4 205 204	Φ.	240.540	Φ	205 000	Φ.	(20, 200)	40.440/
Personnel Cost Professional Services	A, B C	\$	1,325,384 75,000	\$	349,510 18,750	\$	385,898 56,433	Ъ	(36,388) (37,683)	-10.41% -200.97%
Other Services & Charges	A, D		2,276,980		569,245		587,736		(18,491)	-200.97 %
Communications	Α, Β		1,900		475		2,835		(2,360)	-496.79%
Information Technology			110,400		27,600		11,605		15,995	57.95%
Supplies			1,200		300		106		194	64.59%
Operations & Maintenance	A, G		1,698,660		424,665		550,663		(125,998)	-29.67%
Equipment Purchases			143,000		35,750		12,500		23,250	65.03%
Depreciation			470,000	Φ.	117,500	•	117,500	Δ.	(0)	0.00%
Subtotal Before Allocations Allocation of Support Departments		\$	6,102,524 3,573,476	\$	1,543,795 937,209	\$	1,725,276 994,771	\$	(181,481) (57,562)	-11.76% -6.14%
Total Operating Expenses		\$	9,675,999	\$	2,481,004	\$	2,720,047	\$	(239,044)	-9.63%
Operating Surplus/(Deficit)		\$	(1)	_	(62,004)	\$	(45,047)	Ψ	(200,044)	-0.00 /0
Revenues Debt Service Budget vs. Actual Revenues Debt Service Rate Revenue Septage Receiving Support - County Trust Fund Interest	A	\$	8,878,107 109,440 500	\$	2,219,527 27,360 125	\$	2,219,526 109,440 12,321	\$	(1) 82,080 12,196	0.00% 300.00% 9756.72%
Reserve Fund Interest			31,000		7,750		52,126		44,376	572.59%
Total Debt Service Revenues		\$	9,019,047	\$	2,254,762	\$	2,393,413	\$	138,651	6.15%
Debt Service Costs Total Principal & Interest Reserve Additions-Interest Debt Service Ratio Charge Reserve Additions-CIP Growth		\$	7,808,347 31,000 325,000 854,700	\$	1,952,087 7,750 81,250 213,675	\$	1,952,087 52,126 81,250 213,675	\$	(44,376) - -	0.00% -572.59% 0.00% 0.00%
Total Debt Service Costs		\$	9,019,047	\$	2,254,762	\$	2,299,137	\$	(44,376)	-1.97%
Debt Service Surplus/(Deficit)		\$	-	\$	-	\$	94,275	=		
		Rat	te Center S	um	marv					
Tatal Barrara					,	_	5 000 440	•	004.054	0.440/
Total Revenues Total Expenses		\$	18,695,045 18,695,046	\$	4,673,761 4,735,765	\$	5,068,412 5,019,185	\$	394,651 (283,419)	8.44% -5.98%
Surplus/(Deficit)		\$	(1)	\$	(62,004)	\$	49,228	-		
Costs per 1000 Gallons		\$	2.85		<u>, , , , , , , , , , , , , , , , , , , </u>	\$	2.94	=		
Operating and DS		\$	5.51			\$	5.42			
Thousand Gallons Treated or			3,390,400		847,600		925,408		77,808	9.18%
Flow (MGD)			9.289				10.059			

Glenmore Wastewater Rate Center Revenues and Expenses Summary		Budget FY 2023			Budget Year-to-Date		Actual Year-to-Date		Budget rs. Actual	Variance Percentage
Operating Budget vs. Actual										
	Notes									
Revenues										
Operations Rate Revenue		\$	443,640	\$	110,910	\$	110,910	\$	-	0.00%
Interest Allocation			150		38		409		371	990.43%
Total Operating Revenues			443,790	\$	110,948	\$	111,319	\$	371	0.33%
Expenses										
Personnel Cost		\$	115,815	\$	30,550	\$	33,775	\$	(3,225)	-10.56%
Professional Services			5,000		1,250		7,772		(6,522)	-521.72%
Other Services & Charges			35,750		8,938		11,205		(2,268)	-25.38%
Communications			-		-		623		(623)	
Information Technology			4,425		1,106		395		712	64.32%
Supplies			104.050		- 20.700		- 24 61 F		0.400	07.040/
Operations & Maintenance			134,950 3,800		33,738 950		24,615 950		9,123	27.04% 0.00%
Equipment Purchases Depreciation			10.000		2.500		2.500		(0)	0.00%
Subtotal Before Allocations		\$	309,740	\$	79,031	\$	81,834	\$	(2,803)	-3.55%
Allocation of Support Departments		Ψ	134,045	Ψ	35,090	Ψ	35,184	Ψ	(94)	-0.27%
Total Operating Expenses		\$	443,785	\$	114,121	\$	117,018	\$	(2,897)	-2.54%
Operating Surplus/(Deficit)		\$	5	\$	(3,174)	\$	(5,700)			
Revenues Debt Service Rate Revenue Trust Fund Interest Reserve Fund Interest		\$	20,484 - 80	\$	5,121 - 20	\$	5,121 - 109	\$	- - 89	0.00% 442.90%
Total Debt Service Revenues		\$	20.564	\$	5.141	\$	5.230	\$	- 09	0.00%
Total Debt Service Nevertues		<u> </u>	20,004	Ψ	0,141	Ψ	0,200	Ψ_		0.0070
Debt Service Costs										
Total Principal & Interest		\$	18,717	\$	4,679	\$	4,679	\$	_	0.00%
Reserve Additions-CIP Growth			1,761		440		440		-	0.00%
Reserve Additions-Interest			80		20		109		(89)	-442.90%
Total Debt Service Costs		\$	20,558	\$	5,140	\$	5,228	\$	(89)	-1.72%
Debt Service Surplus/(Deficit)		\$	6	\$	2	\$	2	:		
	F	Rate	Center Su	mm	ary					
Total Revenues		\$	464,354	\$	116,089	\$	116,548	\$	460	0.40%
Total Expenses			464,343		119,261		122,247		(2,986)	-2.50%
Surplus/(Deficit)		\$	11	\$	(3,172)	\$	(5,698)			
Conto nor 1000 College		¢	10.72			ф	40.40			
Costs per 1000 Gallons Operating and DS		\$ \$	10.72			\$ \$	12.42 12.97			
Operating and Do		φ	11.22			Φ	12.97			
Thousand Gallons Treated or			41,401		10,350		9,423		(927)	-8.96%
Flow (MGD)			0.113				0.102			

<u>Scottsville Wastewater Rate Center</u> Revenues and Expenses Summary			Budget FY 2023	Ye	Budget ear-to-Date	Actual Year-to-Date		٧	Budget vs. Actual	Variance Percentage
Operating Budget vs. Actual										
	Notes									
Revenues										
Operations Rate Revenue		\$	355,620	\$	88,905	\$	88,905	\$	_	0.00%
Interest Allocation		·	120	•	30	•	331	•	301	1003.37%
Total Operating Revenues		\$	355,740	\$	88,935	\$	89,236	\$	301	0.34%
Expenses										
Personnel Cost		\$	115,795	\$	30,545	\$	33,775	\$	(3,230)	-10.58%
Professional Services		Ψ	5,000	Ψ	1,250	Ψ	241	Ψ	1,009	80.74%
Other Services & Charges			26,650		6,663		7,423		(760)	-11.41%
Communications			3,770		943		987		(44)	-4.70%
Information Technology			4,125		1,031		395		637	61.73%
Supplies			-		-		-		-	
Operations & Maintenance			52,000		13,000		15,708		(2,708)	-20.83%
Equipment Purchases			3,800		950		950		(0)	0.00%
Depreciation			20,000		5,000		5,000		(0)	0.00%
Subtotal Before Allocations		\$	231,140	\$	59,381	\$	64,478	\$	(5,097)	-8.58%
Allocation of Support Departments		_	124,604		32,627	_	32,883	_	(256)	-0.78%
Total Operating Expenses		\$	355,744	\$	92,008	\$	97,361	\$	(5,353)	-5.82%
Operating Surplus/(Deficit)		\$	(4)	\$	(3,073)	\$	(8,125)	:		
Revenues Debt Service Rate Revenue Trust Fund Interest	ļ	\$	10,110 -	\$	2,528 -	\$	2,529 23	\$	2 23	0.06%
Reserve Fund Interest			100		25		217		192	769.04%
Total Debt Service Revenues		\$	10,210	\$	2,553	\$	2,769	\$	217	8.49%
Debt Service Costs										
Total Principal & Interest		\$	7,447	\$	1,862	\$	1,862	\$	-	0.00%
Reserve Additions-Interest			100		25		217		(192)	-769.04%
Estimated New Principal & Interest		_	2,667	_	667	_	667	_	- (400)	0.00%
Total Debt Service Costs Debt Service Surplus/(Deficit)		<u>\$</u>	10,214 (4)	\$ \$	2,554 (1)	<u>\$</u> \$	2,746 23	\$	(192)	-7.53%
Debt Service Surplus/(Denct)		Ψ	(+)	Ψ	(1)	Ψ		:		
		Rate	e Center Si	umr	mary					
			007.07		0::10=		00.00=		=	
Total Revenues		\$	365,950	\$	91,488	\$	92,005	\$	518	0.57%
Total Expenses			365,958		94,561		100,107		(5,545)	-5.86%
Surplus/(Deficit)		\$	(8)	\$	(3,074)	\$	(8,101)			
0.040 0.04000 0.04000		•	45.05			Φ.	00.00			
Costs per 1000 Gallons		\$	15.05			\$	23.36			
Operating and DS		\$	15.48			\$	24.02			
Thousand Gallons Treated			23,643		5,911		4,167		(1,744)	-29.50%
or										

<u>Administration</u>			Budget FY 2023	Υe	Budget ear-to-Date	Actual ear-to-Date	v	Budget rs. Actual	Variance Percentage
Operating Budget vs. A	ctual Notes	<u> </u>							
Revenues	- Notes								
Payment for Services SWA		\$	654,000	\$	163,500	\$ 163,500	\$	-	0.00%
Bond Proceeeds Funding Bond Issuan	ce Costs		-		-	-		-	
Miscellaneous Revenue			2,000		500	740		240	47.95%
Total Ope	rating Revenues	\$	656,000	\$	164,000	\$ 164,240	\$	240	0.15%
Expenses									
Personnel Cost		\$	2,450,092	\$	649,294	\$ 634,948	\$	14,346	2.21%
Professional Services			170,000		42,500	10,283		32,217	75.81%
Other Services & Charges	D		162,600		40,650	54,264		(13,614)	-33.49%
Communications	F		24,780		6,195	22,930		(16,735)	-270.14%
Information Technology	A, E		404,876		101,219	340,700		(239,481)	-236.60%
Supplies			23,000		5,750	5,716		34	0.58%
Operations & Maintenance			67,850		16,963	10,222		6,740	39.74%
Equipment Purchases			13,100		3,275	3,275		(0)	0.00%
Depreciation			-		-	=		-	
Total Ope	erating Expenses	\$	3,316,298	\$	865,845	\$ 1,082,340	\$	(216,494)	-25.00%

Net Costs Allocable to Rate Centers		\$ (2,660,298)	\$ (701,845)	\$ (918,100)	\$ 216,255	-30.
Allocations to the Rate Centers						
Urban Water	44.00%	\$ 1,170,531	\$ 308,812	\$ 403,964	\$ (95,152)	
Crozet Water	4.00%	\$ 106,412	28,074	36,724	(8,650)	
Scottsville Water	2.00%	\$ 53,206	14,037	18,362	(4,325)	
Urban Wastewater	48.00%	\$ 1,276,943	336,886	440,688	(103,802)	
Glenmore Wastewater	1.00%	\$ 26,603	7,018	9,181	(2,163)	
Scottsville Wastewater	1.00%	\$ 26,603	7,018	9,181	(2,163)	
	100.00%	\$ 2,660,298	\$ 701,845	\$ 918,100	\$ (216,255)	

Maintenance

Budget Budget Actual Budget Varia FY 2023 Year-to-Date Year-to-Date vs. Actual Percer	
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Operating Budget vs. Actual

Notes

Revenues Payment for Services SWA		\$	_	\$	_	\$	_	\$	_	
Miscellaneous Revenue		•	-	•	_	•	-	*	-	
Te	otal Operating Revenues	\$	-	\$	-	\$	-	\$	-	
Expenses										
Personnel Cost		\$	1,477,565	\$	390,003	\$	386,961	\$	3,042	0.78%
Professional Services			-		-		-		-	
Other Services & Charges			33,600		8,400		2,866		5,534	65.88%
Communications			24,500		6,125		3,647		2,478	40.46%
Information Technology			32,500		8,125		3,442		4,683	57.64%
Supplies			2,500		625		211		414	66.24%
Operations & Maintenance			104,900		26,225		31,020		(4,795)	-18.28%
Equipment Purchases			212,600		53,150		32,150		21,000	39.51%
Depreciation			-		· -		-		-	
To To	otal Operating Expenses	\$	1,888,165	\$	492,653	\$	460,296	\$	32,357	6.57%

	[Dep	oartment S	umma	ıry		
let Costs Allocable to Rate Centers		\$	(1,888,165)	\$	(492,653)	\$ (460,296)	\$ (32,357)
Allocations to the Rate Centers							
Urban Water	30.00%	\$	566,450	\$	147,796	\$ 138,089	\$ 9,707
Crozet Water	3.50%		66,086		17,243	16,110	1,133
Scottsville Water	3.50%		66,086		17,243	16,110	1,133
Urban Wastewater	56.50%		1,066,814		278,349	260,067	18,282
Glenmore Wastewater	3.50%		66,086		17,243	16,110	1,133
Scottsville Wastewater	3.00%		56,645		14,780	13,809	971
	100.00%	\$	1,888,165	\$	492,653	\$ 460,296	\$ 32,357

Laboratory

Budget	Budget	Actual	Budget	Variance
FY 2023	Year-to-Date	Year-to-Date	vs. Actual	Percentage

Operating Budget vs. Actual

Notes

Revenues

N/A

	Total Operating Expenses	•	553.804	•	144,413	4	127.601	•	16.812	11.64%
Depreciation			-		-		-		-	
Equipment Purchases			1,700		425		425		(0)	0.00%
Operations & Maintenance			121,050		30,263		15,903		14,359	47.45%
Supplies			1,250		313		40		272	87.04%
Information Technology			1,000		250		-		250	100.00%
Communications			1,700		425		234		191	
Other Services & Charges			11,780		2,945		151		2,794	94.86%
Professional Services			-		-		-		-	
Personnel Cost		\$	415,324	\$	109,793	\$	110,847	\$	(1,054)	-0.96%
Expenses										

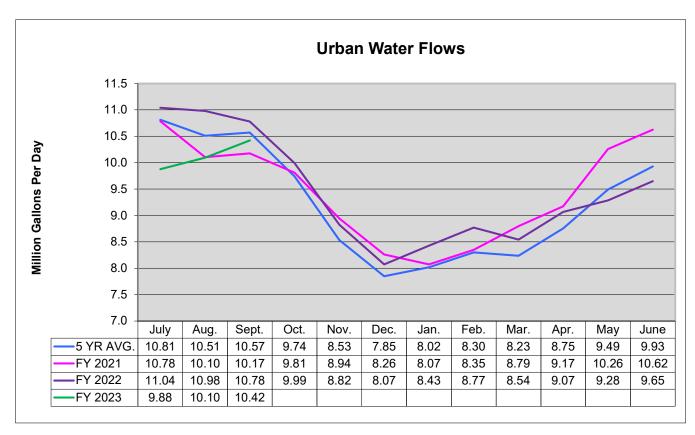
Department Summary											
Net Costs Allocable to Rate Centers		\$	(553,804)	\$	(144,413)	\$	(127,601)	\$	(16,812)	11.0	
Allocations to the Rate Centers											
Urban Water	44.00%	\$	243,674	\$	63,542	\$	56,144	\$	7,397		
Crozet Water	4.00%		22,152		5,777		5,104		672		
Scottsville Water	2.00%		11,076		2,888		2,552		336		
Urban Wastewater	47.00%		260,288		67,874		59,973		7,902		
Glenmore Wastewater	1.50%		8,307		2,166		1,914		252		
Scottsville Wastewater	1.50%		8,307		2,166		1,914		252		
	100.00%	\$	553,804	\$	144,413	\$	127,601	\$	16,812		

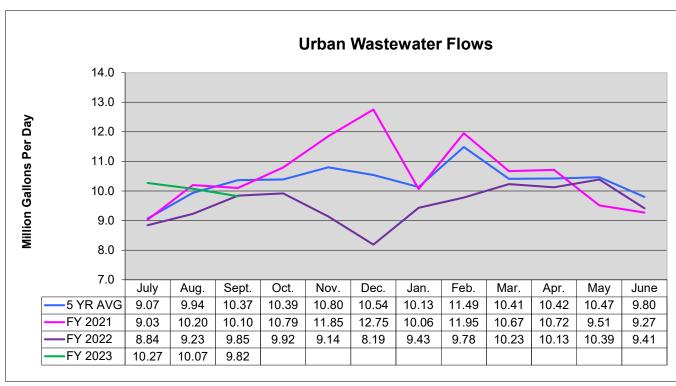
<u>Engi</u>	<u>ineer</u>	<u>ing</u>

<u>Engineering</u>			Budget FY 2023	Budget Year-to-Date	Actual Year-to-Date	ν	Budget s. Actual	Variance Percentage
Operating Budget vs. Actual		<u></u>						
	Notes							
Revenues								
Payment for Services SWA		\$	-	\$ -	\$ -	\$	-	
Total Operating Revenues		\$	-	\$ -	\$ -	\$	-	
Expenses								
Personnel Cost		\$	1,794,680	\$ 475,357	\$ 476,867	\$	(1,511)	-0.32%
Professional Services			125,000	31,250	10,305		20,945	67.02%
Other Services & Charges			18,000	4,500	1,407		3,093	68.74%
Communications			18,772	4,693	2,838		1,855	39.53%
Information Technology			145,000	36,250	23,864		12,386	34.17%
Supplies			5,000	1,250	1,463		(213)	-17.06%
Operations & Maintenance			75,300	18,825	9,797		9,028	47.96%
Equipment Purchases			21,500	5,375	5,375		0	0.00%
Depreciation			-	-	-		-	
Total Operating Expenses		\$	2,203,252	\$ 577,500	\$ 531,917	\$	45,583	7.89%

Department Summary												
Net Costs Allocable to Rate Centers		\$	(2,203,252)	\$	(577,500)	\$	(531,917)	\$	(45,583)	7.89		
Allocations to the Rate Centers												
Urban Water	47.00%	\$	1,035,528	\$	271,425	\$	250,001	\$	21,424			
Crozet Water	4.00%		88,130		23,100		21,277		1,823			
Scottsville Water	2.00%		44,065		11,550		10,638		912			
Urban Wastewater	44.00%		969,431		254,100		234,044		20,056			
Glenmore Wastewater	1.50%		33,049		8,662		7,979		684			
Scottsville Wastewater	1.50%		33,049		8,662		7,979		684			
	100.00%	\$	2,203,252	\$	577,500	\$	531,917	\$	45,583			

Rivanna Water and Sewer Authority Flow Graphs







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 OCTOBER 2022

DATE: NOVEMBER 15, 2022

WATER OPERATIONS:

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

Water Treatment Plant	Average Daily Production (MGD)	Maximum Daily Production in the Month (MGD)
South Rivanna	8.03	9.48 (10/7/2022)
Observatory	1.03	1.52 (10/7/2022)
North Rivanna	<u>0.45</u>	0.55 (10/11/2022)
Urban Total	9.51	11.53 (10/7/2022)
Crozet	0.61	0.74 (10/11/2022)
Scottsville	0.06	0.075 (10/26/2022)
Red Hill	0.0021	0.004 (10/15/2022)
RWSA Total	10.18	-

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

Status of Reservoirs (as of November 7, 2022):

- ➤ Urban Reservoirs are 97% of Total Useable Capacity
 - Ragged Mountain Reservoir is 95% full
 - Sugar Hollow Reservoir is 100% full
 - South Rivanna Reservoir is 100% full
- ➤ Beaver Creek Reservoir (Crozet) is 99% full
- ➤ Totier Creek Reservoir (Scottsville) is 100% full

WASTEWATER OPERATIONS:

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

WRRF	Average Daily Effluent	Average (pp		Averag Suspendo (pp	ed Solids	Average Ammonia (ppm)	
	Flow (MGD)	RESULT	LIMIT	RESULT	LIMIT	RESULT	LIMIT
Moores Creek	9.28	<ql< th=""><th>9</th><th><ql< th=""><th>22</th><th><ql< th=""><th>2.2</th></ql<></th></ql<></th></ql<>	9	<ql< th=""><th>22</th><th><ql< th=""><th>2.2</th></ql<></th></ql<>	22	<ql< th=""><th>2.2</th></ql<>	2.2
Glenmore	0.101	3.5	15	3.2	30	NR	NL
Scottsville	0.043	1.8	25	5.5	30	NR	NL
Stone Robinson	0.002	NR	30	NR	30	NR	NL

NR = Not Required

NL = No Limit

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

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

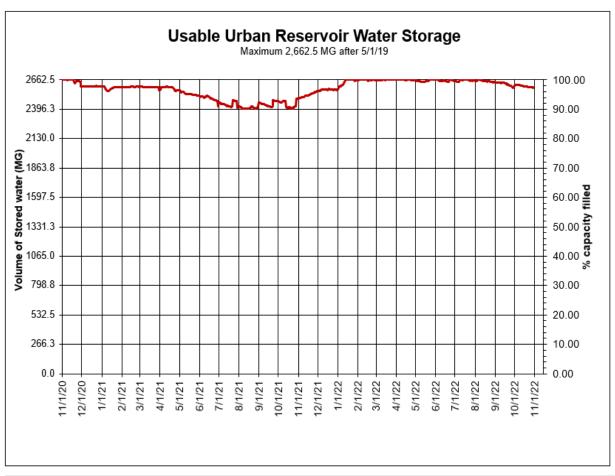
State Annual Allocation (lb./yr.) Permit		Average Monthly Allocation (lb./mo.) *	Moores Creek Discharge October (lb./mo.)	Performance as % of monthly average Allocation*	Year to Date Performance as % of annual allocation
Nitrogen	282,994	23,583	8,035	34%	27%
Phosphorous	18,525	1,544	794	51%	42%

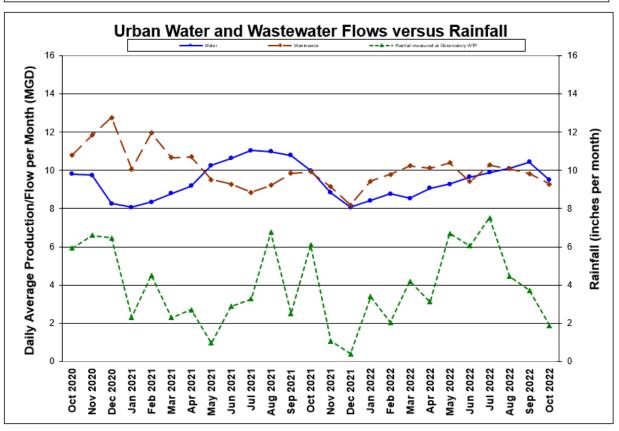
^{*}State allocations are expressed as annual amounts. One-twelfth of that allocation is an internal monthly benchmark for comparative purposes only.

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

JENNIFER WHITAKER, DIRECTOR OF ENGINEERING & FROM:

MAINTENANCE

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

STATUS REPORT: ONGOING PROJECTS **SUBJECT:**

DATE: **NOVEMBER 15, 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/2022/06/Final- 2023-2027-CIP.pdf

Under Construction

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

Design and Bidding

- 4. Ragged Mtn Reservoir to Observatory WTP Raw Water Line and Pump Station
- 5. South Rivanna to Ragged Mtn. Raw Water Line Birdwood to Old Garth
- 6. Beaver Creek Dam, Pump Station and Piping Improvements
- 7. South Rivanna River Crossing
- 8. Central Water Line
- 9. Upper Schenks Branch Interceptor, Phase II
- 10. Red Hill Water Treatment Plant Upgrades
- 11. Emmet Street Water Line Betterment
- 12. Scottsville WRRF Whole Plant Generator and ATS
- 13. Crozet Pump Station Rehabilitation
- 14. Moores Creek Concrete Repairs
- 15. Moores Creek Compost Shed Roof Rehabilitation

Planning and Studies

- 16. South Rivanna Reservoir to Ragged Mtn Reservoir Water Line Right-of-Way
- 17. Asset Management Plan
- 18. SRR to RMR Pipeline Pretreatment Pilot Study

19. Moores Creek Cogeneration Upgrades

Other Significant Projects

- 20. Urgent and Emergency Repairs
- 21. 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: 75%

Base Construction Contract +

Change Orders to Date = Current Value: \$36,748,500 + \$1,141,441 = \$37,889,941

Completion: May 2023 Budget: \$43,000,000

<u>Current Status</u>: Lead paint abatement activities in the SR Filter Building continue. Work at the OBWTP includes the new Chemical Storage Building, sedimentation basin improvements, foundation work for the GAC expansion, a large retaining wall and installation of a sludge control vault. Shutdown of the OBWTP is planned for December 5, 2022 – March 5, 2023.

2. Airport Road Water Pump Station and Piping

Design Engineer: Short Elliot Hendrickson (SEH)

Construction Contractor: Anderson Construction, Inc. (ACI) (Lynchburg, VA)

Construction Start: December 2021

Percent Complete: 25%

Base Construction Contract +

Change Order to Date = Current Value: \$8,520,312 Completion: December 2023 Budget: \$10,000,000

<u>Current Status</u>: Excavation for the base slab at the pump station site is complete and the contractor will begin rebar and concrete work once the building permit is approved. Water line installation has begun at the pump station site and will progress south along Berkmar Drive towards Kohl's.

3. MC 5kV Electrical System Upgrades

Design Engineer: Hazen and Sawyer (Hazen)

Construction Contractor: Pyramid Electrical Contractors (Richmond, VA)

Construction Start: May 2022
Percent Complete: 10%

Base Construction Contract +

Change Order to Date = Current Value: \$5,180,000 - \$970,000 = \$4,210,000

Completion: June 2024 Budget: \$5,050,000

<u>Current Status</u>: The Contractor has mobilized and is working through several pre-construction erosion control activities. Ductbank installation is slated to start later this month.

Design and Bidding

4. 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 (35%)

Construction Start: 2025 Completion: 2028

Budget: \$44,000,000

<u>Current Status</u>: Preparation of engineering plans and specifications continues. Staff is reviewing plans for the waterline, which includes the vast majority of the piping to be installed under the project. Easement negotiations with UVA and the UVA Foundation continue. Staff held a coordination meeting with VDOT on the Rt. 29 Bypass and Fontaine Avenue crossing locations, and the Consultant has started design for the pump station.

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

Design Engineer:

Project Start:

Project Status:

Construction Start:

Completion:

Budget:

Kimley-Horn

June 2021

90% Design

January 2023

December 2023

\$4,000,000

<u>Current Status</u>: Engineering plans and specifications are 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. The railroad permit application will be finalized when one remaining soil boring on the UVAF property is completed.

6. 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: 85% NRCS Planning Process

Construction Start: 2024 Completion: 2027

Budget: \$43,000,000

<u>Current Status</u>: A Joint Permit Application and supporting documents were submitted to VDEQ in October 2022, and is under review. Remaining NRCS requirements, including review and approval of the planning study, are scheduled for completion this winter. The revised Plan Environmental Assessment was approved by the NRCS National Headquarters on October 18, 2022 and the Draft Report was posted for public release and comment on November 4, 2022. The formal comment period will extend until December 19, 2022, after which public comments will be addressed and the document finalized. NRCS funding for final design and construction of the dam spillway upgrades will be requested at a future date.

7. South Rivanna River Crossing

Design Engineer: Michael Baker International (Baker)

Project Start:

Project Status:

60% Design
Construction Start:

Spring 2023
Completion:

April 2024
Budget:

\$7,000,000

<u>Current Status</u>: Easement acquisition has begun and will include County of Albemarle property in Brook Hill River Park along Rio Mills Road. Submission of the JPA is anticipated within the next month.

8. Central Water Line

Design Engineer: Michael Baker International (Baker)

Project Start: July 2021 Project Status: 15% Design

Construction Start: 2024 Completion: 2028

Budget: \$41,000,000

<u>Current Status</u>: Baker is preparing the 30% design submittal.

9. Upper Schenks Branch Interceptor, Phase II

Design Engineer: Frazier Engineering, P.A.

Project Start:

Project Status:

Construction Start:

Completion:

Budget:

July 2021

Design

TBD

TBD

\$4,725,000

Current Status: Project, easement and valuation information was submitted to the Countyfor review.

10. Red Hill Water Treatment Plant Upgrades

Design Engineer: Short Elliot Hendrickson (SEH)

Project Start: July 2022 Project Status: 70% Design Construction Start: April 2023
Completion: December 2023
Budget: \$450,000

<u>Current Status:</u> Design work continues following completion of the geotechnical evaluation. This project was selected by Albemarle County to receive ARPA grant funding.

11. Emmet Street Water Line Betterment

Design Engineer: Whitman, Requardt & Associates (WRA)

Project Start: September 2021

Project Status: Ivy Corridor Public Realm – Complete

Contemplative Commons – In Construction Emmet Streetscape – Preliminary Design

Hydraulic/29 – Preliminary Scoping

Completion: 2030

Budget: \$2,900,000

<u>Current Status</u>: 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 started on September 6, 2022 and is expected to be completed during the week of November 14th. 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. RWSA has initiated discussion with VDOT on potential pipe routing in the upcoming design-build Hydraulic/29 project.

12. Scottsville WRRF Whole Plant Generator and ATS

Design Engineer:

Project Start:

Project Status

Completion:

Budget:

Wiley|Wilson

December 2021

45% Design

Summer 2023

\$520,000

Current Status: The current back-up power generator at the Scottsville WRRF has reached the end of its service life, does not power the entire plant, and needs to be replaced. The generator at the treatment plant site will also be sized to provide backup power for the nearby wastewater influent pump station. Design associated with these improvements continues.

13. Crozet Pump Station Rehabilitation

Design Engineer: Wiley | Wilson Project Start: Fall 2022

Project Status: Pre-Design Investigation

Completion: 2025 Budget: \$590,000

<u>Current Status</u>: Consultant is developing a scope of work to fully rehabilitate and replace components

that have reached their useful life.

14. Moores Creek Concrete Repairs

Design Engineer: Hazen and Sawyer (Hazen)

Project Start: November 2022

Project Status: Design
Completion: Winter 2024
Budget: \$2,650,000

<u>Current Status</u>: Development of a work authorization is underway and will include additional structural improvements at the aeration basins and the Rivanna Wastewater Pump Station.

15. Moores Creek Compost Shed Roof Rehabilitation

Design Engineer: Hazen and Sawyer (Hazen)

Project Start: Fall 2022
Project Status: Design
Completion: TBD

Budget: \$1,360,000

<u>Current Status:</u> The shed roof rafters are deteriorated and need to be replaced. A consultant has been selected and work authorization development has begun.

Planning and Studies

16. 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: 2023 Budget: \$2,295,000

<u>Current Status</u>: Progress continues in our efforts to acquire 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.

17. Asset Management Plan

Design Engineer: GHD, Inc.
Project Start: July 2018

Project Status: CMMS Implementation – 97% Complete

AMP Implementation – 5% Complete

Completion: CMMS Implementation – October 2022

AMP Implementation – 2024

Budget: \$1,180,000

Current Status: For implementation of the new Computerized Maintenance Management System

(CMMS), GHD has completed updates to our facility geodatabase and is continuing the software configuration process. A recent software update has complicated the process and GHD and RWSA staff are working with Cityworks to resolve. Work continues to fully implement the Asset Management program across all applicable Authority facilities with a detailed review of our asset register and continued development of default asset attributes which will be used to evaluate asset condition and lifespan.

18. SRR to RMR Pipeline – Pretreatment Pilot Study

Design Consultant: SEH/DiNatale Project Start: August 2020

Project Status: 100% Complete (Phase 1), 90% Complete (Phase 2)

Completion: December 2022

Budget: \$22,969 (Phase 1), \$116,401 (Phase 2)

<u>Current Status</u>: Final efforts by the consultant are underway to better clarify operations of the raw water transfer system and associated reservoir levels during drought conditions.

19. Moores Creek Cogeneration Upgrades

Design Engineer: SEH

Project Start: October 2021

Project Status: Preliminary Engineering/Study (95%)

Completion: June 2024 Budget: \$2,145,000

<u>Current Status</u>: Manufacturers in the Cogeneration Industry are being interviewed and additional information is being gathered to determine acceptable providers before engineering plans and specifications are completed.

Other Significant Projects

20. 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
2021-01/2022-03	WBI and RVI Erosion	\$50,000
2022-09	CZI Force Main ARV Replacements	\$300,000
2022-02/05/12	Miscellaneous MCI/PCI/RVI MH Repairs	\$70,000
2022-10	MCAWRRF Primary Clarifier Building 36" Sanitary Sewer Leak	\$15,000

• <u>WBI and RVI Erosion:</u> In February 2022, RWSA Maintenance staff notified Engineering staff of some ditch lines along the Rivanna Interceptor that are in need of repair. In addition, during the

- previous round of manhole inspections on the Woodbrook Interceptor, there was one small ditch identified to be in need of repairs there as well. Staff visited these sites in August and will be issuing the work to its On-Call Maintenance Contractors for repairs. The scope of work is likely to include installation of erosion control at the ditch crossings over the various sewer lines.
- CZI Force Main ARV Replacements: Over the past several years, staff have been monitoring the condition of the air release valves (ARVs) up and down the force main portions of the Crozet Interceptor, as they have been continuing to degrade. These valves are 1980s-vintage, and while they have been serviced and partially rebuilt over the years by the RWSA Maintenance Department, replacement of the tapping saddle and corporation stop has not been possible, since shutdown of the force main is required. Historically, it has taken several hours to drain the force main to allow for the work to take place, and by the time that has occurred, the upstream pump stations need to turn on to prevent overflow. Now with the Flow Equalization Tank complete, this work can take place with the force main offline for up to a 24-hr period. Staff is waiting for the final few required materials to arrive, and is coordinating with VDOT on necessary permitting requirements. The work is anticipated to start in early December, pending crew availability, completion of permitting, and arrival of the required materials.
- Miscellaneous MCI/PCI/RVI MH Repairs: Over the past several months, staff have identified issues with various manholes on the Moores Creek, Powell Creek, and Rivanna Interceptors (MCI, PCI, and RVI, respectively). These include one manhole on MCI that needs to be raised, as it was historically buried but found in Summer 2021 by the RWSA Maintenance & Engineering Departments, one manhole on RVI that needs a failing HDPE liner to be removed and cementitious mortar to be installed, and one manhole each on PCI and MCI that need to be coated with cementitious mortar due to root intrusion and groundwater infiltration. This work will be performed through the On-Call Maintenance contract with Digs, and staff visited the site with the Contractor on July 15th. The appropriate MH on MCI was raised on November 1st, 2022. The remaining coating efforts will take place in January 2023.
- MCAWRRF Primary Clarifier Building 36" Sanitary Sewer Leak: On July 7th, RWSA Engineering Staff was made aware of a small leak through the wall in the basement of the Primary Clarifier Building at MCAWRRF. An inspection was performed by Hazen & Sawyer on August 3rd, and a report with repair recommendations has been prepared. The repairs will include specialty grouting work to plug the voids discovered in the field in order to stop the leak, as well as possible installation of a coating system for further protection of the concrete. During the week of September 26th, RWSA Maintenance staff performed the required grouting work on the inside of the splitter box to stop the leak. Some further grouting work on the building side of the wall was completed on October 31st to ensure that the repair holds long-term, and then a coating system will be applied inside of the splitter box in the affected areas during the MCAWRRF Concrete Repairs Project discussed above.

21. Security Enhancements

Design Engineer: Hazen & Sawyer

Construction Contractor: Security 101 (Richmond, VA)

Construction Start: March 2020

Percent Complete: 70% (WA5), 0% (WA6), 0% (WA7)

Based Construction Contract +

Change Orders to Date = Current Value: \$718,428 (WA1) + \$91,130 (WA2) + \$128,166

(WA3) + \$189,698 (WA4) + \$76,920 (WA5) +

120,994 (WA6) + 4,853 (WA7) = 1,330,192

(Total) October 2022 (WA5), May 2023 (WA6) \$2,810,000

Completion: Budget:

Current Status: WA5, which authorizes card access installation at Glenmore Water Resource Recovery Facility (GWRRF), Scottsville Water Resource Recovery Facility (SVWRRF), and Red Hill Water Treatment Plant (RHWTP), began during the week of June 20th. Conduit and cable pulling is complete at all facilities covered in the WA, and the only work that remains is wiring at RHWTP, and programming by Security 101 at each facility, likely to be completed this Fall. WA6 will include card access installation at RWSA's remote sites, including all dams and pump stations. This work was authorized in early August, with completion scheduled for May 2023. WA7, which includes a pilot of a program that will test electronic padlocks at several RWSA facilities, has been authorized. These electronic padlocks have the potential to add an extra layer of security to unmanned facilities such as tanks, dams, and other facilities. If the pilot is successful, wide scale implementation of this technology is possible. Staff has also kicked off final design of a project with Hazen & Sawyer to improve the front entrance of MCAWRF and install additional fencing, gates, and card access. This will allow staff to better control access to the facility and provide staff with the means to vet access by visitors, vendors, consultants, and contractors.

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.

<u>South Rivanna:</u> 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. 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.

3. 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

Design and Bidding

4. 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.

5. 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 2023.

6. Beaver Creek Dam and Pump Station Improvements

<u>Dam:</u> 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 early 2023. 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.

<u>Pump Station:</u> 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.

7. 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.

8. 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 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. The RWSA Board approved the Southern (Cherry Ave) Route in June 2022.

9. 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 though 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.

12. 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.

13. 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.

14. Crozet Pump Station Rehabilitation

The Crozet Pump Stations were constructed in the 1980's and many of the components are original. This project includes the replacement of pump and valves and other components at Pump Station 2 to improve pumping capabilities at this location, as well as Pump Stations 1 and 3 as the pumps are reaching the end of their useful life. It also includes roof replacements at all four pump stations, siding replacement for the wet well enclosure at Pump Station 3, and installation of new wells at pump stations 3 and 4. This project also now intends to include new back-up generators at Pump Stations 1 through 3 as the generators have also reached the end of their useful life.

15. Moores Creek AWRRF Concrete Repairs

The two Holding Ponds and the two Equalization Basins were built with the 1977 Moores Creek Upgrades and are critical to the plant infrastructure to contain wet weather flows. The 40-year-old concrete is showing signs of degradation. Following inspections in the Fall 2020, Hazen recommended we implement concrete repairs soon to extend the life of the concrete basins. Work will include crack repair, spalling repair, joint repair, and coating of miscellaneous metals and valves in the basins.

16. Moores Creek AWRRF Compost Shed Roof Rehabilitation

In the early 1980's a large metal-framed shed roof was constructed to house the biosolids composting operations. Subsequent to stopping composting at Moores Creek AWRRF, the shed serves as an equipment maintenance yard, solids handling facility and material storage lock-up. The shed roof is showing signs of rafter deterioration and ongoing drainage issues. This project will evaluate and perform remediation needs at this facility.

17. Scottsville WRRF Whole Plant Generator and ATS

The current back-up power generator at the Scottsville Water Treatment Plant does not power the entire plant, serving only the facilities needed to send flow to the lagoons. This project will offer greater treatment flexibility and monitoring capability for the operations staff, particularly when the plant is unmanned and monitored remotely.

Planning and Studies

18. 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.

19. 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.

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.

21. MCAWRRF Cogeneration Upgrades

The MCAWRRF has an existing cogeneration facility that was constructed in 2011. The purpose of the facility was to provide a beneficial use of the methane gas produced by the digester process at the plant, and in doing so, provide both digester heating and energy to the plant's electrical distribution system. Unfortunately, the existing cogeneration facility requires expensive recurring maintenance services, has proprietary equipment which further complicates servicing needs, and has had a number of operational issues that have impeded the benefit this facility was intended to provide. As a result, a Cogeneration System Analysis was performed to determine a recommended approach for proceeding with improvements to the existing facility, installation of a new cogeneration facility without the issues of the previous facility or removing the cogeneration facility altogether and providing a backup boiler. This project includes costs for installation of a new cogeneration facility as described in the Cogeneration System Analysis.

Other Significant Projects

22. <u>Urgent and Emergency Repairs</u>

• 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.

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 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 OBWTP under the Improvements Project in August 2021.

Access Control on exterior doors at the CZWTP and SVWTP was substantially completed in November 2021. Conduit work at SRWTP and OBWTP was substantially complete in May 2022.

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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 OCTOBER 2022

DATE: NOVEMBER 15, 2022

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

	Month	Daily Average	
City Usage (gal)	141,078,499	4,554,145	48.2%
ACSA Usage (gal)	151892,380	4,899,754	51.8%
Total (gal)	293,070,879	9,453,899	

The RWSA Wholesale Metering Administrative and Implementation Policy requires that water use be measured based upon the annual average daily water demand of the City and ACSA over the trailing twelve (12) consecutive month period. The Water Cost Allocation Agreement (2012) established a maximum water allocation for each party. If the annual average water usage of either party exceeds this value, a financial true-up would be required for the debt service charges related to the Ragged Mountain Dam and the SRR-RMR Pipeline projects. Below are graphs showing the calculated monthly water usage by each party, the trailing twelve-month average (extended back to July 2021), and that usage relative to the maximum allocation for each party (6.71 MGD for the City and 11.99 MGD for ACSA). Completed in 2019 for a cost of about \$3.2 M, our Wholesale Metering Program consists of 25 remote meter locations around the City boundary and 3 finished water flow meters at treatment plants.

Note: Staff detected a read issue with Meter Site 32 – Fontaine Ave in July 2022 and replaced the meter on September 27, 2022.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation

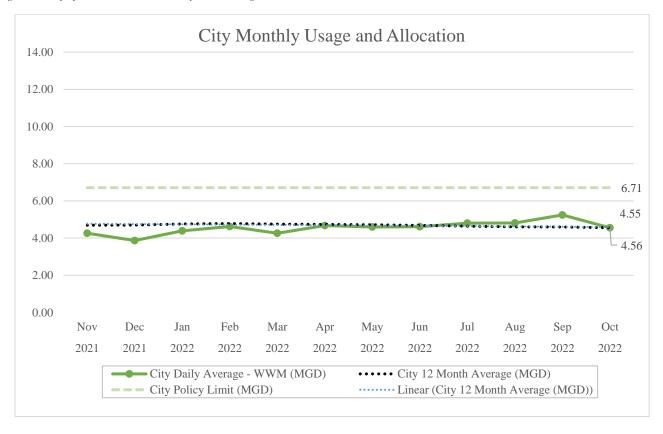
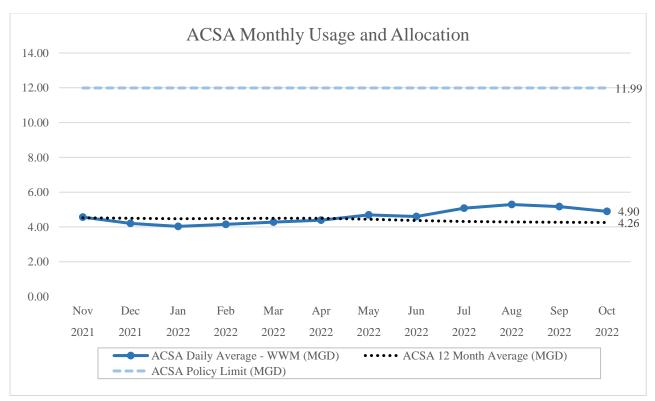
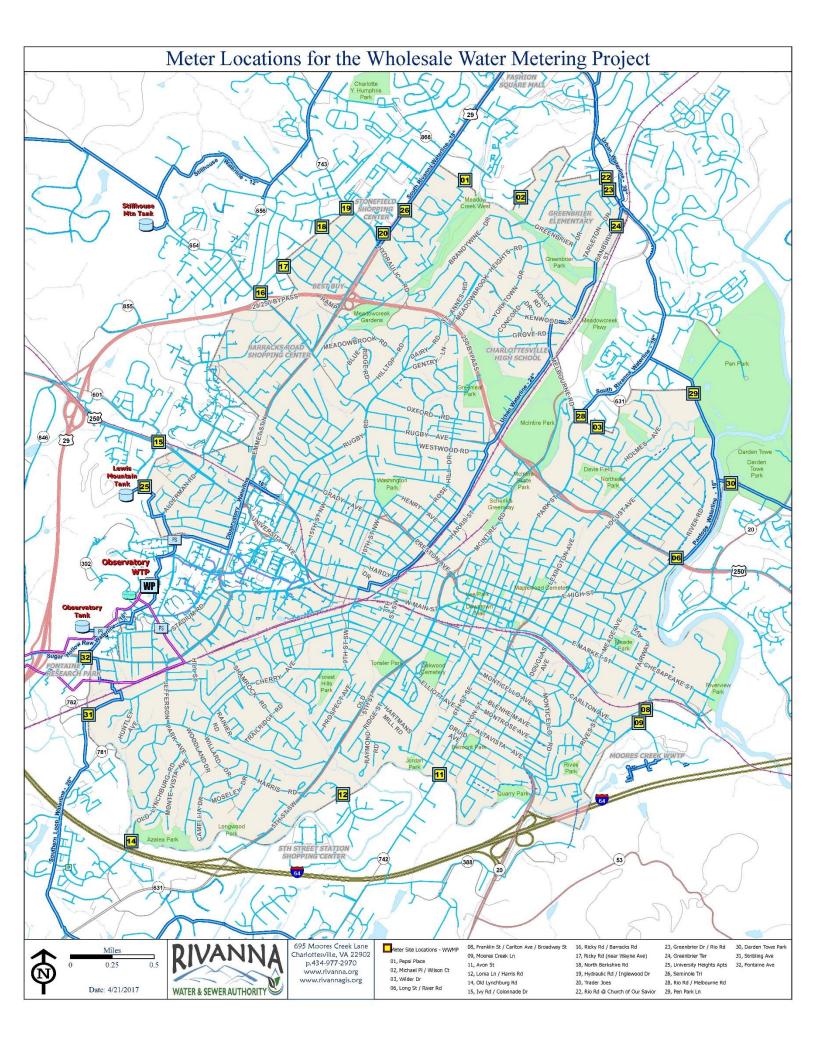


Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation







MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD

OF DIRECTORS

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: APPROVAL OF BOARD MEETING SCHEDULE FOR

CALENDAR YEAR 2023

DATE: NOVEMBER 15, 2022

This memo is to propose a schedule for Board meetings during calendar year 2023, as indicated by the attachment.

In accordance with our By-Laws, the Board will conduct regular public meetings at 2:15 p.m. (or upon conclusion of the RSWA Meeting when it is also held), on the fourth Tuesday of the month, except traditionally the November and December meetings have been advanced to avoid conflicts with the holidays. The proposed schedule continues this practice.

In addition, recent Virginia legislation allows the Board to conduct virtual public meetings for 25% of the annual meetings (rounded to the higher whole number = 3 for RWSA). The virtual meetings are not allowed to be consecutive, and are proposed for March, September, and December in 2023.

Board Action Requested

Approval of the attached Board Meeting Schedule for Calendar Year 2023.





Board Meeting Schedule

Listed below are the proposed RWSA Board of Directors meeting dates for calendar year 2023:

Tuesday, January 24, 2023

Tuesday, February 28, 2023

Tuesday, March 28, 2023 ◆

Tuesday, April 25, 2023

Tuesday, May 23, 2023

Tuesday, June 27, 2023

Tuesday, July 25, 2023

Tuesday, August 22, 2023

Tuesday, September 26, 2023 ◆

Tuesday, October 24, 2023

Tuesday, November 14, 2023 *

Tuesday, December 12, 2023 */◆

RWSA meetings are held on the fourth Tuesday of each month, and will start following the RSWA Board meetings but not earlier than 2:15 p.m. RWSA meetings will be held in the large conference room on the second floor of the Administration Building at the Moores Creek Advanced Water Resources Recovery Facility, 695 Moores Creek Lane, Charlottesville, VA or virtually via Zoom.

♦ Virtual Meetings via Zoom

Note: 3 non-consecutive meetings per calendar year are allowed to be conducted annually

The November and December meetings are advanced to avoid conflicts with the weeks of Thanksgiving and Christmas.



MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY

BOARD OF DIRECTORS

FROM: ANDREA BOWLES, WATER RESOURCES MANAGER

REVIEWED BY: JENNIFER WHITAKER, DIRECTOR OF ENGINEERING

BILL MAWYER, EXECUTIVE DIRECTOR

UPDATE ON BUCK MOUNTAIN PROPERTY MANAGEMENT PLAN **SUBJECT:**

AND SALE OF 1880 BUCK MOUNTAIN RD, FREE UNION, VA

DATE: **NOVEMBER 15, 2022**

This memo is to provide a recommendation to sell 2.2 acres of property with a house known as the "Elliot House" to the highest responsive and responsible bidder for \$136,501. Background information on the process that has led to the potential sale of is also provided.

BACKGROUND:

The Buck Mountain property is located in the Free Union area of Albemarle County. The 1,314acre 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 spinymussel, 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 him 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 about the proposed leasing and sale of properties.
- April 2022: the Board approved "Lease and Sale Procedures", and requested any sale to include rehabilitation of the house as an option.

- August and September 2022: Requests for Bids were issued for sale of the Elliot House and 2.2 acres. No bids were received.
- October 2022: Request for Bids was issued for sale of the Elliot House and 2.2 acres with lower minimum bid requirements. Four bids were received to rehabilitate the house. However, one bid was determined to be nonresponsive as it did not include a general description of how the bidder will rehabilitate the house consistent with the specifications, as required by Section II.A of the Request for Bids. A second bid was determined to be nonresponsive as it was not submitted on the correct Bid Form, as required by Section D of the Request for Bids. The highest responsive and responsible bid of \$136,501 was submitted by Mr. Matthew Lucas of Charlottesville.

Board Action Requested:

After conducting a public hearing, consider the attached Resolution to sell the property to the highest responsive and responsible bidder, Mr. Matthew Lucas of 1966 Buck Mountain Road, Free Union, for \$136,501, and authorize the Executive Director to execute the necessary documents required to complete the transaction.

Attachment:

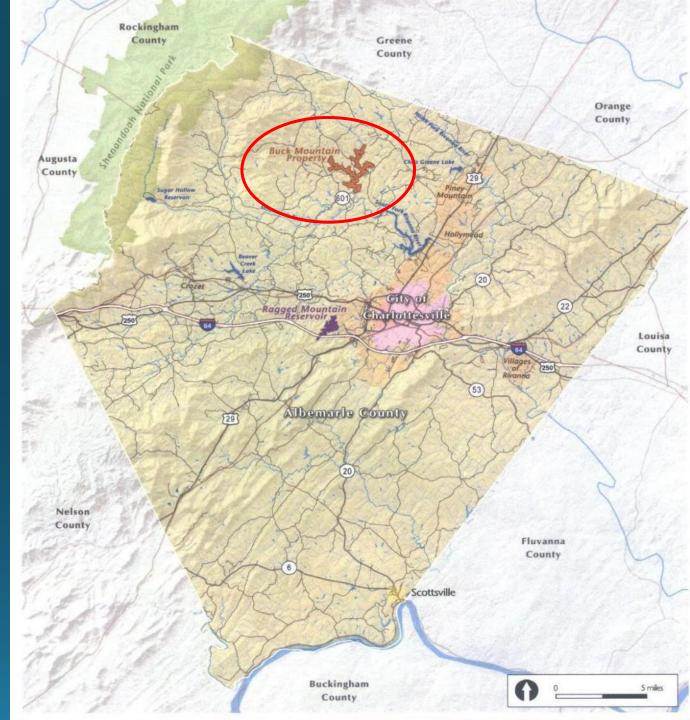
Resolution for the Sale of Property 1880 Buck Mountain Road, Free Union, VA in Albemarle County by the Rivanna Water and Sewer Authority

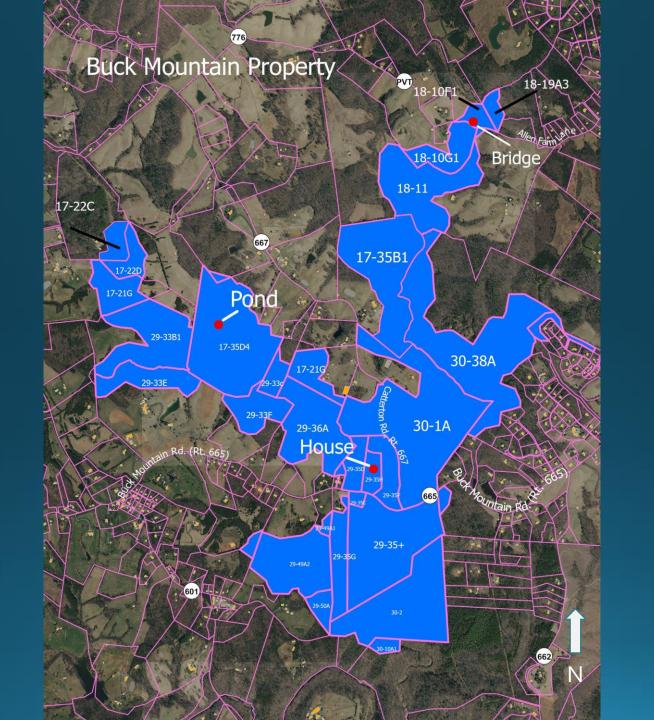


Buck Mountain Management Plan

Sale of Elliot House and Property

Presented by:
Andrea Bowles, Water Resources Manager
November 15, 2022





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).

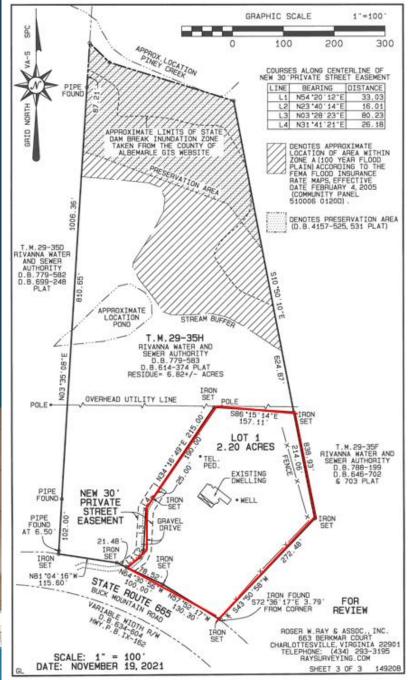
B. Process

- 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.)







History of the Property

- 1980's
 RWSA acquired 1314 acres for a water supply reservoir. Due to the presence
 of the James Spinymussel, the reservoir was not permitted by federal
 agencies.
- April 2019 A former property owner requested the Board to sell him the property acquired from him by condemnation.
- June 2019 Staff provided a presentation on the Buck Mountain property. Board requested staff to prepare a Master Plan to optimize use of the property.
- August 2020 Staff presented a Master Plan to the Board. The Board concurred with staff recommendation to develop a more detailed Property Management Plan.

- March 2021 Presented Property Management Plan to the Board. Board concurred with staff recommendation to further investigate the leasing and sale of several parcels and creation of a property management fund.
- February 2022 Staff updated the Board on the leasing and sale of specific properties.
- March 2022 Board held a Public Hearing and received comments about the leasing and sale of several parcels.
- April 2022 Board approved "Lease and Sale Procedures", and asked staff to make rehabilitating the house an option for any sale.
- Aug Oct 2022 Advertised multiple times for Bids
- Nov 2022 Received 4 Bids; two of the Bids were determined to be nonresponsive and were rejected.

RIVANNA WATER & SEWER AUTHORITY

695 Moores Creek Lane, Charlottesville, VA 22902-9016 (434) 977-2970 | www.rivanna.org

August 14, 2022

REQUEST FOR BIDS

RFB No. 397

FOR: Sale of 1880 Buck Mountain Road

2.2 Acres with House and all Improvemen

TMP 02900-00-00-035H3

DUE DATE: September 14, 2022

2:00 p.m., Local Time

MAILING & DELIVERY ADDRESS: 695 Moores Creek Lane

Charlottesville, VA 22902-9016

CONTACT: Lonzy E. Wood

Director of Finance and Administration

695 Moores Creek Lane Charlottesville, VA 22902-9016

(434) 977-2970, ext. 198 lwood@rivanna.org

TECHNICAL CONTACT: Andrea Bowles

Water Resources Manager 695 Moores Creek Lane Charlottesville, VA 22902-9016 (434) 977-2970, ext. 197

abowles@rivanna.org



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September 18, 2022

REQUEST FOR BIDS

RFB No. 401

FOR: Sale of 1880 Buck Mountain Road

2.2 Acres with House and all Impro

TMP 02900-00-00-035H3

DUE DATE: October 11, 2022

3:00 p.m., Local Time

MAILING & DELIVERY ADDRESS: 695 Moores Creek Lane

Charlottesville, VA 22902-9016

CONTACT: Lonzy E. Wood

Director of Finance and Administration

695 Moores Creek Lane Charlottesville, VA 22902-9016 (434) 977-2970, ext. 198

lwood@rivanna.org

TECHNICAL CONTACT: Andrea Bowles

Water Resources Manager 695 Moores Creek Lane Charlottesville, VA 22902-9016 (434) 977-2970, ext. 197 abowles@rivanna.org

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October 18, 2022

REQUEST FOR BIDS

RFB No. 402

FOR: Sale of 1880 Buck Mountain Road

2.2 Acres with House and all Improvements

TMP 02900-00-00-035H3

DUE DATE: November 8, 2022

2:00 p.m., Local Time

MAILING & DELIVERY ADDRESS: 695 Moores Creek Lane

Charlottesville, VA 22902-9016

CONTACT: Lonzy E. Wood

Director of Finance and Administration

695 Moores Creek Lane Charlottesville, VA 22902-9016 (434) 977-2970, ext. 198

lwood@rivanna.org

TECHNICAL CONTACT: Andrea Bowles

Water Resources Manager 695 Moores Creek Lane Charlottesville, VA 22902-9016 (434) 977-2970, ext. 197 abowles@riyanna.org



Bidding Results

Request For Bid (RFB)	Min. Bid Rehab Required	Bids Received	Min. Bid Rehab Not Required	Bids Received	Advertise Date(s) RFB
RFB # 397 Due Date 9/14/2022	\$250,000	None	\$300,000	None	8/14/22, 9/4/22, 9/9/22
RFB # 401 Due Date 10/11/2022	\$199,000	None	\$249,000	None	9/18/2022
RFB # 402 Due Date 11/8/2022	\$124,000	\$124,000 \$136,501 \$151,000 \$176,000	\$149,000	None	10/18/2022

Summary

- Received two responsive and responsible bids (\$124,000 and \$136,501) to purchase the 2.2-acre property and rehabilitate the Elliot house.
- The highest bidder was Matthew Lucas of 1966 Free Union Road with a bid of \$136,501.

Questions?

Action Requested:

After conducting a Public Hearing, consider approval of the Resolution to sell the 2.2 acre property and house to Matthew Lucas for a price of \$136,501 and authorize the Executive Director to execute the documents required to complete the transaction.





RESOLUTION FOR THE SALE OF PROPERTY 1880 BUCK MOUNTAIN ROAD, FREE UNION, VA IN ALBEMARLE COUNTY BY THE RIVANNA WATER AND SEWER AUTHORITY

WHEREAS, the Board of Directors authorized the sale of improved real estate in accordance with the "Lease and Sale of Buck Mountain Real Estate" procedure approved by the Board on May 24, 2022, and

WHEREAS, the Authority publicly advertised a Request for Bids to consider the sale of property with an address of 1880 Buck Mountain Road, Free Union, VA 22936 in Albemarle County, TMP 02900-00-00-035H3, 2.2 acres, with an existing house and all improvements, and

WHEREAS, the Authority received two responsive and responsible bids on November 8, 2023 and conducted a public hearing for the proposed sale of property to the highest bidder on November 15, 2022 after advertising the actual date fixed for the public hearing in the Daily Progress on October 24, 2022 and October 31, 2022, and

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority hereby authorizes the sale of property with an address of 1880 Buck Mountain Road, Free Union, VA 22940 in Albemarle County, TMP 02900-00-035H3, 2.2 acres, with an existing house and all improvements for an amount totaling \$136,501 to Matthew Lucas of Free Union, VA, and authorizes the Executive Director to execute all documents required to complete the transaction.



695 MOORES CREEK LANE CHARLOTTESVILLE, VA 22902-9016 Tel: 434.977.2970

FAX: 434.293.8858 WWW.RIVANNA.ORG

MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY

BOARD OF DIRECTORS

FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND ADMINISTRATION

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: RECOMMENDATION FOR DISPOSITION OF FY 2022 RATE

CENTER RESULTS

DATE: NOVEMBER 15, 2022

The Authority ended the previous fiscal year with a cumulative net deficit of roughly \$582,400 which must be allocated from the appropriate cost center discretionary reserves of \$28.4 M, as shown by the attached summary. Some of that shortfall in the operating cash balance is due to the policy target for operating cash increased from the previous year, which is discussed below.

There are several notable causes for the year-end deficit. There were significant legal and engineering services expenditures that were not budgeted including Buck Mountain support, Morey Creek interceptor transfer, and the Glenmore sanitary sewer needs assessment, which were all needed services that were unbudgeted. Glenmore used more reserves than were on hand. The Authority went through two different types of Information Technology security assessments. Several needed projects were immediately undertaken to strengthen our network and cyber security profile. Biosolids hauling costs increased significantly during the year. The hauler was no longer willing to provide transportation services for the contract price due to rising fuel costs and other expenses. Staff opted to rebid the transportation services mid-year rather than to pay the higher cost requested. While the new bid price was less than the requested cost from the contracted hauler, the new bid price increased the overall costs. Crozet had several SCADA and data network needs that were completed.

<u>Background</u>: After completion of the audit, staff performs an analysis and reconciliation between rate centers of the year-ending financial results and the effect on the operating cash liquidity position. This is also done to ensure that rate center results are kept separate from each other. In some years, one rate center may have a deficit and others may have a surplus, therefore, we do not want one rate center's surplus funding another rate center's deficit.

There is only one operating cash account where all transactions originate during the year for all capital and operating activities, including inflow from revenues and bond proceeds, and outflow for expenses and debt payments. Capital transactions are reconciled and separated at the end of each month, (i.e., no capital funds are in the operations account at the end of each month or at year end). However, all of the

rate centers' operating results are comingled until this process of determining the results for the year and making transfers to or from the respective rate center reserves to ensure proper segregation.

The operations account has a <u>target</u> working cash balance of 60 days of cash on hand to meet daily and monthly cash flow needs, which currently is \$6,879,600 (based on the FY 2023 budget). This is an increase of \$476,500 from the prior year, because the FY 2023 budget was increased compared to the FY 2022 budget. At year end, this target is compared to actual <u>cash basis</u> results for the fiscal year, and the variance, if any, is brought before the Board for action, which is consistent with the Authority's financial policy.

At year end, operating cash and cash equivalents were as follows:

Cash on hand	\$6,297,100
60 Day Cash Target	\$6,879,500
Deficit Operational Cash	\$ (582,400)

The target amount of operating cash is underfunded by \$582,400 due to the previously mentioned yearend results. Therefore, the following transfers to/(from) the discretionary reserves are recommended for FY 2022 to bring the operations account back to the target balance and properly keep the six rate center reserves separated. FY 2021 to FY 2018 transfers are included for comparison:

Transfers to (from) reserves based on ending results for each rate center:

	FY2022		FY2021		FY2020		FY2019		FY2018	
Urban Water	\$ (302,200)	\$	(473,900)	\$	(432,300)	\$	(1,466,200)	\$	1,800	
Urban Wastewater	(31,500)		869,900		153,000		1,716,400		(1,313,500)	
Crozet Water	(115,900)		(107,700)		117,500		(80,300)		(58,500)	
Scottsville Water	(64,600)		18,800		64,500		1,100		30,100	
Glenmore Wastewater	(53,800)		(3,800)		(25,500)		25,400		26,800	
Scottsville Wastewater	 (14,400)		(2,900)	_	27,600		33,200	_	17,700	
	\$ (582,400)	\$	300,400	\$	(95,200)	\$	229,600	\$	(1,295,600)	

To summarize the year-end process, one of the Authority's financial policies is to keep the operations account financially sound with 60 days of cash for normal operating cash flow needs. That goal will continue to be met, and the reserves will continue to provide for the yearly variances in budget versus actual results. As any given year progresses, the operations account temporarily funds rate center deficits and accumulates surpluses, and a reconciliation of the results to allocate the respective surpluses and deficits is performed annually after the year-end audit is complete. The Board has taken similar action for the previous 16 years. Attached is a summary of the ending reserves for Fiscal Year 2022.

Board Action Requested:

Board action is requested to authorize the transfer funds to/(from) the respective reserves for FY 2022 ending results to or from the operations account as follows:

Urban Water	\$ (302,200)	Urban Wastewater	\$ (31,500)
Crozet Water	\$ (115,900)	Glenmore Wastewater	\$ (53,800)
Scottsville Water	\$ (64,600)	Scottsville Wastewater	\$ (14,400)

Rivanna Water and Sewer Author Statement of Reserve Balances June 2022 Reserves	-	June FY 2022 ding Balance	FROM (TO) OPERATIONS ACCOUNT FY 2022 ending results reserve adjustment proposed Board action needed **		Adjusted FY 2022 Ending Balance
Discretionary Reserve	\$	10,855,029	\$ (302,200)	\$	10,552,829
Rate Stabilization Fund	Ψ	805,746	ψ (002,200)	Ψ	805,746
Watershed Management Fund		161,027			161,027
Subtotal	\$	11,821,802		\$	11,519,602
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Urban Wastewater					
Discretionary Reserve	\$	10,420,314	(31,500)	\$	10,388,814
Rate Stabilization Fund		778,767			778,767
Subtotal	\$	11,199,081		\$	11,167,581
Crozet Water Discretionary Reserve	\$	1,055,328	(115,900)	\$	939,428
,	•	, ,	(2,223)	•	,
Scottsville Water					
Discretionary Reserve	\$	345,676	(64,600)	\$	281,076
Glenmore Wastewater		·			
Discretionary Reserve	\$	42,082	(53,800)	\$	(11,718)
Scottsville Wastewater					
Discretionary Reserve	\$	63,821	(14,400)	\$	49,421
Capital Fund					
Specific Capital Projects	\$	2,633,485		\$	2,633,485
Vehicle Replacement Fund	\$	1,239,701		\$	1,239,701
Subtotal Discretionary Reserves	\$	28,400,976	\$ (582,400)	\$	27,818,576
Indenture Restricted Minimum	\$	500,000		\$	500,000
Total Reserves	* \$	28,900,976		\$	28,318,576

^{* -} Agrees to investment balances - audited.

^{** -} Proposed Board action

MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY

BOARD OF DIRECTORS

RIVANNA SOLID WASTE AUTHORITY

BOARD OF DIRECTORS

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: PRESENTATION AND VOTE ON APPROVAL OF REMOTE

PARTICIPATION POLICY AND AMENDMENT OF BY-LAWS

DATE: NOVEMBER 15, 2022

My brief presentation today is to recommend approval of the attached "Remote Participation Policy" and your "Amended and Restated By-Laws", with both to be effective on November 15, 2022.

The Code of Virginia, Chapter 37 "Virginia Freedom of Information Act", paragraph 2.2-3708.3, effective on September 1, 2022, allows the Rivanna Authorities to implement the following general procedures after adoption of a Remote Participation Policy:

- 1. To allow remote participation by a Board Member, under certain stated circumstances (medical; principal residence is more than 60 miles from the meeting location) and with approval of the Board.
- 2. To conduct all-virtual public meetings, limited to 25% of the annual meetings (rounded to the higher whole number), and on nonconsecutive months, with virtual access and comment in these meetings available to the public.

A similar Policy has been adopted by the Albemarle County Board of Supervisors, City Council, and the Albemarle County Service Authority.

Amendments to the By-Laws of each Authority are also proposed to:

1. Incorporate the Remote Participation Policy into the By-Laws, including clarification of remote and virtual participation to constitute being "present" for the meetings. Our By-Laws require all members to be present to amend the By-Laws.

- 2. Clarify the authority of the Executive Director to execute contracts and other instruments on behalf of the Authority.
- 3. Establish governance of Board meetings by Robert's Rules of Order, and an order of precedence for application of the Rules, By-Laws, and Articles of Incorporation.

Action Requested by Each Board:

Approve the Resolution to Adopt the Remote Participation Policy and the Amended and Restated By-Laws, with both to be effective on November 15, 2022.

Attachments:

Resolutions of the Rivanna Solid Waste Authority Board of Directors to Adopt the Remote Participation Policy and the Amended and Restated By-Laws
Remote Participation Policy of the Rivanna Solid Waste Authority
Amended and Restated By-Laws of the Rivanna Solid Waste Authority

Resolutions of the Rivanna Water and Sewer Authority Board of Directors to Adopt the Remote Participation Policy and the Amended and Restated By-Laws
Remote Participation Policy of the Rivanna Water and Sewer Authority
Amended and Restated By-Laws of the Rivanna Water and Sewer Authority



RESOLUTION OF THE BOARD OF DIRECTORS OF THE RIVANNA WATER AND SEWER AUTHORITY REGARDING

NOVEMBER 15, 2022

ADOPTION OF REMOTE PARTICIPATION POLICY

WHEREAS, pursuant to Section 2.2-3708.3 of the Code of Virginia (the "<u>Code</u>"), the Rivanna Water and Sewer Authority (the "<u>Authority</u>") has prepared a Remote Participation Policy (the "<u>Policy</u>"), describing the circumstances under which an all-virtual public meeting and/or remote participation will be allowed and the process the Authority will use for making requests to use remote participation, approving or denying such requests, and creating a record of such requests, and fixing the number of times remote participation for personal matters or all-virtual public meetings can be used per calendar year, said Policy being attached hereto as <u>Exhibit A</u>;

WHEREAS, Section 2.2-3708.3(D) of the Code requires that the adoption of the Policy by recorded vote at a public meeting; and

WHEREAS, the Board of Directors of the Authority (the "Board") deems it advisable and in the best interest of the Authority to adopt the Policy;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby authorizes, approves, adopts and ratifies the Policy in all respects.

Approved by the Board of Directors

Remote Participation Policy of the Rivanna Water and Sewer Authority

Effective November 15, 2022

1. Applicability of Policy.

- **A. Purposes.** Pursuant to *Virginia Code* § 2.2-3708.3, the following policy:
 - describes the circumstances under which an all-virtual public meeting and/or remote participation will be allowed and the process the Rivanna Water and Sewer Authority (hereinafter, the "Authority") will use for making requests to use remote participation, approving or denying such requests, and creating a record of such requests; and
 - **2.** fixes the number of times remote participation for personal matters or all-virtual public meetings can be used per calendar year, not to exceed the limitations set forth in *Virginia Code* § 2.2-3708.3(B)(4) and (C)(9).
- **B.** Application. This policy will be applied strictly and uniformly, without exception, to the entire membership and without regard to the identity of the member(s) requesting remote participation or the matters that will be considered or voted on at the meeting.
- **2. Non-Emergency Individual Participation.** Except as provided elsewhere in this policy, individual members may use remote participation instead of attending a public meeting in person only pursuant to and in compliance with the following rules:
 - **A.** Grounds for Remote Participation; Advance Notice of the Chair. Individual members may use remote participation instead of attending a public meeting in person if, in advance of the public meeting, the member notifies the Chair that:
 - **1.** <u>Personal Medical Condition.</u> The member has a temporary or permanent disability or other medical condition that prevents the member's physical attendance;
 - **2.** <u>Family Member's Medical Condition.</u> A medical condition of a member of the member's family requires the member to provide care that prevents the member's physical attendance;
 - **3.** <u>Distant Meeting Location.</u> The member's principal residence is more than 60 miles from the meeting location identified in the required notice for such meeting; or
 - **4.** <u>Identified Personal Matter; Limitation on Use.</u> The member is unable to attend the meeting due to a personal matter (such as a family event or business commitment) and identifies with specificity the nature of the personal matter.

However, the member may not use remote participation due to personal matters more than two meetings per calendar year or 25 percent of the meetings held per calendar year rounded up to the next whole number, whichever is greater.

- **B.** Minutes. If participation by a member through electronic communication means is approved by a disinterested majority of the total members of the Authority Board pursuant to Paragraph 2, the Authority shall record in its minutes the remote location from which the member participated; however, the remote location need not be open to the public and may be identified in the minutes by a general description.
 - **a.** <u>Medical Condition.</u> If participation is approved pursuant to Paragraphs 2(A)(1) or 2(A)(2), the Authority shall also include in its minutes the fact that the member participated through electronic communication means due to a (i) temporary or permanent disability or other medical condition that prevented the member's physical attendance or (ii) family member's medical condition that required the member to provide care for such family member, thereby preventing the member's physical attendance.
 - **b.** Distant Meeting Location. If participation is approved pursuant to Paragraph 2(A)(3), the Authority shall also include in its minutes the fact that the member participated through electronic communication means due to the distance between the member's principal residence and the meeting location.
 - **c.** <u>Identified Personal Matter.</u> If participation is approved pursuant to Paragraph 2(A)(4), the Authority shall also include in its minutes the specific nature of the personal matter cited by the member.
 - **d.** <u>Disapproval.</u> If a member's participation from a remote location pursuant to Paragraph 2 is disapproved because such participation would violate this policy, such disapproval shall be recorded in the minutes with specificity.
- C. When Chair Requests to Participate Remotely. In the event the Chair seeks to participate through electronic communication means from a remote location, the Chair must notify the Vice-Chair or other presiding officer and should notify the Secretary on or before the day of the meeting.
- **D.** Audibility of Member Participating Remotely. The Secretary will arrange for the voice of the absent member to be heard by all persons in attendance at the meeting location. If, for any reason, the voice of the absent member cannot reasonably be heard, the meeting may continue without the participation of the absent member.
- **3.** <u>All-Virtual Public Meetings.</u> Except as provided in Paragraph 4 below, the Authority may hold all-virtual public meetings only (i) for regular and special meetings deemed appropriate to be conducted virtually by the Chair of the Authority and (ii) pursuant to and in compliance with the following rules:

- **A.** Meeting Notice. An indication of whether the meeting will be an in-person or all-virtual public meeting must be included in the required meeting notice along with a statement notifying the public that the method by which the Authority chooses to meet shall not be changed unless the Authority provides a new meeting notice in accordance with the provisions of *Virginia Code* § 2.2-3707;
- **<u>B. Public Access.</u>** Public access to the all-virtual public meeting must be provided via electronic communication means;
- C. Member Audibility/Visibility. The electronic communication means used must allow the public to hear all members of the Authority participating in the all-virtual public meeting and, when audio-visual technology is available, to see the members of the Authority as well:
- **D.** Contact for Transmission Failure. A phone number or other live contact information must be provided to alert the Authority if the audio or video transmission of the meeting provided by the Authority fails, the Authority must monitor such designated means of communication during the meeting, and the Authority must take a recess until public access is restored if the transmission fails for the public;
- **E.** Meeting Materials. A copy of the proposed agenda and all agenda packets and, unless exempt, all materials furnished to members of the Authority for a meeting must be made available to the public in electronic format at the same time that such materials are provided to members of the Authority;
- **<u>F. Public Comment.</u>** The public must be afforded the opportunity to comment through electronic means, including by way of written comments, at those public meetings when public comment is customarily received;
- **G.** Multiple Members in a Single Location. No more than two members of the Authority may be together in any one remote location unless that remote location is open to the public to physically access it;
- **<u>H. Closed Sessions.</u>** If a closed session is held during an all-virtual public meeting, transmission of the meeting to the public must resume before the Authority votes to certify the closed meeting as required by *Virginia Code* § 2.2-3712(D);
- <u>I.</u> <u>Number and Frequency of All-Virtual Meetings.</u> The Authority may not convene an all-virtual public meeting (i) more than two times per calendar year or 25 percent of the meetings held per calendar year rounded up to the next whole number, whichever is greater, or (ii) consecutively with another all-virtual public meeting; and
- <u>J. Minutes.</u> Minutes of all-virtual public meetings held by electronic communication means must be taken as required by *Virginia Code* § 2.2-3707 and must include the fact that the meeting was held by electronic communication means and the type of electronic communication means by which the meeting was held. If a member's participation from a

remote location pursuant to this subsection is disapproved because such participation would violate this policy, such disapproval shall be recorded in the minutes with specificity.

4. During a Declared Emergency or When a Continuity of Government Ordinance is in Effect. The Authority may meet by electronic communication means without a quorum of the Authority physically assembled at one location when a state of emergency is declared pursuant to *Virginia Code* § 44-146.17 or a local emergency is declared pursuant to *Virginia Code* § 44-246.21, subject to the provisions and requirements of *Virginia Code* § 2.2-3708.2. The Authority also may meet by electronic communication means when an ordinance adopted pursuant to *Virginia Code* § 15.2-1413 to ensure the continuity of government of Albemarle County and the City of Charlottesville is in effect.

(Virginia Code §2.2-3708.2 and §2.2-3708.3)

* * * * *

Adopted 11/15/22.

101277279.3





RESOLUTION OF THE BOARD OF DIRECTORS OF THE RIVANNA WATER AND SEWER AUTHORITY **ADOPTING** AMENDED AND RESTATED BY-LAWS

NOVEMBER 15, 2022

WHEREAS, the Board of Directors (the "Board") of the Rivanna Water and Sewer Authority (the "Authority") has determined that it is in the best interests of the Authority to amend and restate the current By-Laws of the Authority, which were adopted and made effective as of August 25, 2020 (the "Current By-Laws"); and

WHEREAS, pursuant to Article VI of the Current By-Laws, the Board may amend, add to, alter, or repeal the Current By-Laws at any meeting of all of the Board, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting; and

WHEREAS, the Board deems it advisable and in the best interest of the Authority to amend and restate the Current By-Laws in order to conform language regarding remote participation in Board meetings in accordance with the Code of Virginia and the Remote Participation Policy of the Authority to be adopted on even date herewith, to clarify signing authority for contracts and other instruments of the Authority, and to make certain other procedural updates; and

WHEREAS, the Board has considered the proposed Amended and Restated By-Laws in the form attached hereto as Exhibit A (the "Amended and Restated By-Laws") and has determined that it is advisable and in the best interests of the Authority to amend and restate the Current By-Laws by adoption of the Amended and Restated By-Laws and to ratify, confirm and approve all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority;

NOW, THEREFORE, BE IT RESOLVED, that the Current By-Laws are hereby amended and restated in their entirety, and the Amended and Restated By-Laws attached hereto as Exhibit A are hereby adopted and ratified in all respects, effective immediately; and be it

FURTHER RESOLVED, that the Secretary of the Authority or any other proper officer of the Authority be, and each of them hereby is, authorized and directed to place the Amended and Restated By-Laws and this resolution in the minute books of the Authority; and be it

FURTHER RESOLVED, that all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority prior to the date of these resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority; and be it

FURTHER RESOLVED, that the proper officers of the Authority are, and each of them hereby is, authorized and directed to prepare, execute and deliver, or cause to be prepared, executed and delivered, any and all agreements, documents, certificates and instruments, and to take any and all such other actions as may be deemed necessary, desirable or appropriate, to carry out the purpose and intent of each of the foregoing resolutions; and be it

FURTHER RESOLVED, that any actions taken by such officers or directors prior to the date of these resolutions that are within the authority conferred by the foregoing resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority.

Approved by the Board of Directors
at a meeting at which all members of the
Board of Directors were present
November 15, 2022
Jeff Richardson, Secretary

AMENDED AND RESTATED BY-LAWS OF THE RIVANNA WATER AND SEWER AUTHORITY

(Effective November 15, 2022)

ARTICLE I

OFFICES

- 1. The principal office of the Rivanna Water and Sewer Authority (the "Authority") shall be in Charlottesville or Albemarle County, Virginia, at 695 Moores Creek Lane, Charlottesville, Virginia 22902 or at such particular place as shall be fixed from time to time by resolution of the Board of Directors (the "Board").
- 2. Except as otherwise required by resolution of the Board, or as business of the Authority may require, all of the books and records of the Authority shall be kept at the office as designated above.

ARTICLE II

DIRECTORS

1. The Authority shall have a Board of Directors. All corporate powers shall be exercised by or under the authority of, and the business and affairs of the Authority managed under the direction of, its Board of Directors, pursuant to the provisions of the Articles of Incorporation of the Authority, as amended from time to time (the "Articles") and Sections 15.2-5113 and 5114 of the Code of Virginia (the "Code"). Directors shall be appointed or elected in the manner and for the term set forth in the Articles of Incorporation.

ARTICLE III

OFFICERS

1. The officers of the Authority shall be a Chair, a Vice-Chair, and a Secretary-Treasurer. An election will be held at the regular April Board meeting in even-numbered years with the duly elected officers assuming office as of May 1 for a term of two years and such officers may succeed themselves indefinitely.

- 2. The Chair shall be the presiding officer of the Authority. Unless some other person is specifically authorized by procedures or instructions adopted by vote of the Board, and except as otherwise provided in Article III, Section 5 below, the Chair shall sign all contracts and other instruments to be executed on behalf of the Authority. The Chair shall perform all the duties and have such other powers as the Board may from time to time designate. The Chair shall be a member of the Board.
- 3. The Vice-Chair shall perform all the duties of the Chair in the event of the Chair's absence or incapacitation or in the event of the Chair's office falling vacant and also perform such tasks as the Chair or the Board may assign from time to time. The Vice-Chair shall be a member of the Board.
- 4. The Secretary-Treasurer or his or her designee shall attend all meetings of the Board and act as secretary or clerk thereof; such person shall record all votes and keep accurate records of all proceedings at such meetings in a minute book to be kept for that purpose, which shall be open at all reasonable times to the inspection of any member or any other person authorized by law. The Secretary-Treasurer or his or her designee shall keep in safe custody the official seal of the Authority and shall have authority to affix such seal to all papers authorized to be executed by the Authority requiring such seal to be affixed. The Secretary-Treasurer shall have authority to cause copies to be made of all minutes and other records and documents of the Authority and to give certificates under the official seal of the Authority to the effect that such copies are true copies, and all persons dealing with the Authority may rely upon such certificates.

The Secretary-Treasurer or his or her designee shall perform all the duties commonly incident to the office of secretary or clerk and shall perform such other duties and have such powers as the Board may from time to time designate. In the absence of the Secretary-Treasurer and/or his or her designee from any meeting of the Board, a temporary secretary may be chosen who shall record the proceedings thereof.

Subject to the provisions of any trust agreement securing revenue bonds, bond anticipation notes, or other financial obligation of the Authority, the Secretary-Treasurer or his or her designee shall have the care and custody of the funds of the Authority and shall have and exercise, under the supervision of the Board, all the powers and duties commonly incident to the office of treasurer. The Secretary-Treasurer shall be selected by the Board and may or may not be a member of the Board.

- 5. There shall be an Executive Director who shall be the chief administrative officer of the Authority and shall be selected from a list of qualified individuals by vote of the Board. The Executive Director, acting on request of the Chair, shall cause notice to be given of all meetings of the Authority as required by law or by these By-Laws. The Executive Director is authorized to sign contracts and other instruments to be executed on behalf of the Authority; provided, for purchasing or procurement contracts: (i) the aggregate amount of the contract is \$200,000 or less; (ii) the term of the contract is one year or less; and (iii) funds required for payment terms of the contract have been authorized by the Board through adoption or amendment of the annual operating budget.
- 6. In addition to the officers, duties and powers above mentioned, the Board may provide for and delegate to such deputies, assistants and other officers as it may deem necessary from time to time, who shall perform such duties and have powers as the Board may designate.

ARTICLE IV

MEETINGS OF THE AUTHORITY

- 1. Meetings of the Board may be called by the Chair, or in the event of the Chair's absence from the Commonwealth or incapacity, by the Vice-Chair, for such time and at such place in the Commonwealth as may be specified in the call.
- 2. Meetings shall be governed by Robert's Rules of Order (the "Rules") to the extent that they do not conflict with these Amended and Restated By-Laws (these "Bylaws") or the Articles. Should there be a conflict between the Rules and the Articles and/or these Bylaws, the Articles will control, followed by these Bylaws, followed by the Rules.
- 3. Regular meetings of the Board will be held at the Authority's Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia, at 2:15 p.m. on the fourth Tuesday of each month, or at such other place as the Board may designate from time to time. Public notice of such meetings will be required only if the time and/or place of such meetings is changed for any reason.
- 4. Notwithstanding anything herein to the contrary, meetings of the Board may also be held virtually and/or a Board member may participate in a Board meeting through remote participation, in each case in accordance with Sections 2.2-3708.2 and 2.2-3708.3 of the Code and the Remote Participation Policy of the Rivanna Water and Sewer Authority adopted by the Board on November 15, 2022, as may be adopted from time to time by the Board in accordance with the Code (the "Remote Participation Policy"), in each case at the frequency and pursuant to the terms and limitations set forth therein.
- 5. Meetings in addition to the regular meeting may be called by the Chair, or the Vice-Chair when acting for the Chair under the conditions stated above, for such time and at such place in the Commonwealth as may be specified in the call, provided written notice of such meeting is

delivered to the Board members, left at their residence or usual place of business, or delivered by electronic mail not less than forty-eight hours prior to the date and time specified for such meeting. In addition, the Executive Director shall take such measures as may be necessary to make sure that news media and the public have at least twenty-four hours notice of any such special meeting.

- 6. In the event that the officer issuing the call for a special meeting declares an emergency to exist, the notice required shall be three hours, provided that the declaration of emergency is approved by vote of the Board members at that special meeting.
- 7. The notification of Board meetings at which subject matter is discussed and/or acted upon by the Authority in compliance with the requirements of Section 15.2-5100, et seq. of the Code (the Virginia Water and Waste Authorities Act) will be as specified in that statute.
- 8. All Board meetings shall be open to the public, except when, pursuant to the provision of Section 2.2-3711 of the Code, the Board members have voted to hold a closed meeting, and no resolution, rule, contract, regulation, or motion discussed in such closed meeting, in each case as authorized by an exemption set forth in Section 2.2-3711 of the Code, shall become effective unless the Board reconvenes in open meeting and takes a vote on such resolution, rule, contract, regulation, or motion that shall have its substance reasonably identified in the open meeting.
- 9. At meetings of the Board the following order of the business shall be observed, in general, as far as is consistent with the purpose of the meeting:
 - a. Correction and approval of the minutes of the preceding meeting.
 - b. Consideration of items from the public, except matters on the agenda for which a public hearing has been called, and responses from Board or staff to public comments.
 - c. Vote on approval of consent agenda, to include regular staff reports on

expenditures, operations, and capital projects.

- d. Other business, including unfinished business.
- 10. The vote on the adoption of every resolution shall be by ayes and nays. The names of the Board members voting for or against the resolution shall be entered upon minutes of the meetings, unless the vote be unanimous, in which case the minutes will so state.
- 11. A majority of the members of the Board shall constitute a quorum but the vote of the majority of the total members shall be necessary for any action taken by the Board.
- 12. A Board member may designate an alternate to attend meetings the member is unable to attend. Such alternates may take part in any deliberations of the Board but may not vote on any matter and may be excluded from any closed meeting.

ARTICLE V

OFFICIAL SEAL

The official seal of the Authority shall consist of the embossed impression of a circular metallic disc containing in the outer rim the words "Rivanna Water and Sewer Authority." The Secretary-Treasurer or his or her designee shall secure such seal and cause the impression thereof to be made on the minutes of the meetings of the Board.

ARTICLE VI

AMENDMENTS

Except as otherwise provided by law, these By-Laws may be amended, added to, altered, or repealed in whole or in part by the Board at any meeting, including at any meeting of the Board held virtually pursuant to the requirements of Article IV, Section 4 herein, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting. Any member participating in the meeting through remote participation pursuant to the requirements of Article IV, Section 4 herein

is deemed to be present at such meeting.

ARTICLE VII

FISCAL YEAR

The fiscal year of the Authority shall be determined in the discretion of the Board, but in the absence of any such determination it shall be the year beginning July 1 and ending June 30.

> Certified to be the Amended and Restated By-Laws of the Rivanna Water and Sewer Authority, duly adopted by the Board at a meeting at which all members of the Board were present on November 15, 2022.

Name:		
Office:		

101354819.4

AMENDED AND RESTATED BY-LAWS OF THE

RIVANNA WATER AND SEWER AUTHORITY

(Effective August 25 November 15, 20202022)

ARTICLE I

OFFICES

- 1. The principal office of the Rivanna Water and Sewer Authority (the "Authority") shall be in Charlottesville or Albemarle County, Virginia, at 695 Moores Creek Lane, Charlottesville, Virginia 22902 or at such particular place as shall be fixed from time to time by resolution of the Board of Directors (the "Board").
- 2. Except as otherwise required by resolution of the Board, or as business of the Authority may require, all of the books and records of the Authority shall be kept at the office as designated above.

ARTICLE II

<u>D</u>.

IRECTORS

DIRECTORS

1. The Authority shall have a Board of Directors. All corporate powers shall be exercised by or under the authority of, and the business and affairs of the Authority managed under the direction of, its Board of Directors, pursuant to the provisions of the Articles of Incorporation of the Authority, as amended from time to time (the "Articles") and Sections 15.2-5113 and 5114 of the Code of Virginia (the "Code"). Directors shall be appointed or elected in the manner and for the term set forth in the Articles of Incorporation.

ARTICLE III

O FFICERS

OFFICERS

1. The officers of the Authority shall be a Chair, a Vice-Chair, and a Secretary-Treasurer. An election will be held at the regular April Board meeting in even-numbered years with the duly elected officers assuming office as of May 1 for a term of two years and such officers may succeed themselves indefinitely.

- 2. The Chair shall be the presiding officer of the Authority. Unless some other person is specifically authorized by procedures or instructions adopted by vote of the Board, and except as otherwise provided in Article III, Section 5 below, the Chair shall sign all contracts and other instruments to be executed on behalf of the Authority. The Chair shall perform all the duties and have such other powers as the Board may from time to time designate. The Chair shall be a member of the Board.
- 3. The Vice-Chair shall perform all the duties of the Chair in the event of the Chair's absence or incapacitation or in the event of the Chair's office falling vacant and also perform such tasks as the Chair or the Board may assign from time to time. The Vice-Chair shall be a member of the Board.
- 4. The Secretary-Treasurer or his or her designee shall attend all meetings of the Board and act as secretary or clerk thereof; such person shall record all votes and keep accurate records of all proceedings at such meetings in a minute book to be kept for that purpose, which shall be open at all reasonable times to the inspection of any member or any other person authorized by law. The Secretary-Treasurer or his or her designee shall keep in safe custody the official seal of the Authority and shall have authority to affix such seal to all papers authorized to be executed by the Authority requiring such seal to be affixed. The Secretary-Treasurer shall have authority to cause copies to be made of all minutes and other records and documents of the Authority and to give certificates under the official seal of the Authority to the effect that such copies are true copies, and all persons dealing with the Authority may rely upon such certificates.

The Secretary-Treasurer or his or her designee shall perform all the duties commonly incident to the office of secretary or clerk and shall perform such other duties and have such powers as the Board may from time to time designate. In the absence of the Secretary-Treasurer and/or his or her designee from any meeting of the Board, a temporary secretary may be chosen who shall record the proceedings thereof.

Subject to the provisions of any trust agreement securing revenue bonds, bond anticipation notes, or other financial obligation of the Authority, the Secretary-Treasurer or his or her designee shall have the care and custody of the funds of the Authority and shall have and exercise, under the supervision of the Board, all the powers and duties commonly incident to the office of treasurer. The Secretary-Treasurer shall be selected by the Board and may or may not be a member of the Board.

5.5. There shall be an Executive Director who shall be the chief administrative officer of the Authority and shall be selected from a list of qualified individuals by vote of the Board. The Executive Director, acting on request of the Chair, shall cause notice to be given of all meetings of the Authority as required by law or by these By-Laws. The Executive Director is authorized to sign contracts and other instruments to be executed on behalf of the Authority; provided, for purchasing or procurement contracts: (i) the aggregate amount of the contract is \$200,000 or less; (ii) the term of the contract is one year or less; and(iii)_(iii)_funds required for payment terms of the contract have been authorized by the Board through adoption or amendment of the annual operating budget.

6.6. In addition to the officers, duties and powers above mentioned, the Board may provide for and delegate to such deputies, assistants and other officers as it may deem necessary from time to time, who shall perform such duties and have powers as the Board may designate.

<u>- 4-</u>

ARTICLE IV

MEETINGS OF THE AUTHORITY

- 1. Meetings of the Board may be called by the Chair, or in the event of the Chair's absence from the Commonwealth or incapacity, by the Vice-Chair, for such time and at such place in the Commonwealth as may be specified in the call.
- 2. Meetings shall be governed by Robert's Rules of Order (the "Rules") to the extent that they do not conflict with these Amended and Restated By-Laws (these "Bylaws") or the Articles. Should there be a conflict between the Rules and the Articles and/or these Bylaws, the Articles will control, followed by these Bylaws, followed by the Rules.
- <u>3.</u> 2.Regular meetings of the Board will be held at the Authority's Administration Building, 695 Moores Creek Lane, Charlottesville, Virginia, at 2:15 p.m. on the fourth Tuesday of each month, or at such other place as the Board may designate from time to time. Public notice of such meetings will be required only if the time and/or place of such meetings is changed for any reason.
- 4. Notwithstanding anything herein to the contrary, meetings of the Board may also be held virtually and/or a Board member may participate in a Board meeting through remote participation, in each case in accordance with Sections 2.2-3708.2 and 2.2-3708.3 of the Code and the Remote Participation Policy of the Rivanna Water and Sewer Authority adopted by the Board on November 15, 2022, as may be adopted from time to time by the Board in accordance with the Code (the "Remote Participation Policy"), in each case at the frequency and pursuant to the terms and limitations set forth therein.
- 5. 3-Meetings in addition to the regular meeting may be called by the Chair, or the Vice-Chair when acting for the Chair under the conditions stated above, for such time and at such place in the Commonwealth as may be specified in the call, provided written notice of such

meeting is delivered to the Board members, left at their residence or usual place of business, or delivered by electronic mail not less than forty-eight hours prior to the date and time specified for such meeting. In addition, the Executive Director shall take such measures as may be necessary to make sure that news media and the public have at least twenty-four hours notice of any such special meeting.

- <u>6.</u> 4.In the event that the officer issuing the call for a special meeting declares an emergency to exist, the notice required shall be three hours, provided that the declaration of emergency is approved by vote of the Board members at that special meeting.
- <u>7.</u> <u>5.</u>The notification of Board meetings at which subject matter is discussed and/or acted upon by the Authority in compliance with the requirements of <u>Title 15.2,Section 15.2-5100</u>, et seq. of the Code of Virginia (the Virginia Water and Waste Authorities Act) will be as specified in that <u>documentstatute</u>.
- 8. 6.All Board meetings shall be open to the public, except when, pursuant to the provision of Section 2.2-3711 of the Code-of Virginia, the Board members have voted to hold a closed meeting, and no resolution, rule, contract, regulation, or motion discussed in such closed meeting, in each case as authorized by an exemption set forth in Section 2.2-3711 of the Code, shall become effective unless the Board members reconvenereconvenes in open meeting and taketakes a vote on such resolution, rule, contract, regulation, or motion that shall have its substance reasonably identified in the open meeting.
- 9. 7.At meetings of the Board the following order of the business shall be observed, in general, as far as is consistent with the purpose of the meeting:
 - a. Reading, correction, Correction and approval of the minutes of the preceding meeting.
 - b. <u>Items Consideration of items</u> from the public, except matters on the agenda

- for which a public hearing has been called, and responses from Board or staff to public comments.
- c. Consent Vote on approval of consent agenda, to include regular staff reports on expenditures, operations, and capital projects.
- d. Other business, including unfinished business.
- 10. 8. The vote on the adoption of every resolution shall be by ayes and nays. The names of the Board members voting for or against the resolution shall be entered upon minutes of the meetings, unless the vote be unanimous, in which case the minutes will so state.
- 9.A majority of the members of the Board shall constitute a quorum but the vote of the majority of the total members shall be necessary for any action, other than procedural matters, to be taken by the Board.
- 12. 10.A Board member may designate an alternate to attend meetings the member is unable to attend. Such alternates may take part in any deliberations of the Board but may not vote on any matter and may be excluded from any closed meeting.
- 11.A Board member may participate in a Board meeting through electronic communication from a remote location, subject to the conditions of § 2.2-3708.1 of the Code of Virginia and the Board's policy for remote participation as set forth below:
 - a.At least four hours prior to the scheduled time for the Board meeting, the Board member desiring to participate remotely shall notify the Chair in writing, which may be by e-mail or text message, and shall identify with specificity the nature of the reason as to-why remote participation is necessary. Permitted reasons shall be limited to
 - (i) an emergency, (ii) a personal matter, or (iii) a temporary or permanent disability or other medical condition that prevents the member's physical attendance. The specific

nature of the reason and the remote location from which the Board member participated shall be recorded in the minutes of the meeting.

b.No Board member may participate remotely in more than two Board meetings per calendar year; provided, however, such limitation shall not apply to remote attendance due to temporary or permanent disability or other medical condition that prevents the Board member's physical attendance.

e. The Authority shall have arranged for the voice of the remote participant to be heard by persons present at the meeting location, including other Board members, and the public. The Authority shall be capable of monitoring the remote connection and record in the minutes both the time the remote participation was connected and the time disconnected, and the minutes shall clearly record the vote of the remote participant on all voting matters during the remote participation.

d.A quorum of Board members shall be physically present at the meeting location in order for Board actions to be considered or taken, however, voting by remote participation may count toward determining that the majority of members voted for or against a particular action as described in Section 9 of this Article IV.

e.In the event a Board member's remote participation is disapproved by the Chair or the Board because such participation would violate the terms and conditions of this Section 11, such disapproval and the reason therefor shall be recorded in the minutes.

ARTICLE V

OFFICIAL

SEAL

The official seal of the Authority shall consist of the embossed impression of a circular

metallic disc containing in the outer rim the words "Rivanna Water and Sewer Authority." The Secretary-Treasurer or his or her designee shall secure such seal and cause the impression thereof to be made on the minutes of the meetings of the Board.

ARTICLE VI

 $\underline{\mathbf{A}}$

MENDMENTS

AMENDMENTS

Except as otherwise provided by law, these By-Laws may be amended, added to, altered, or repealed in whole or in part by the Board at any meeting, including at any meeting of the Board held virtually pursuant to the requirements of Article IV, Section 4 herein, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting. Any member participating in the meeting through remote participation pursuant to the requirements of Article IV, Section 4 herein is deemed to be present at such meeting.

ARTICLE VII

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YEAR

The fiscal year of the Authority shall be determined in the discretion of the Board, but in the absence of any such determination it shall be the year beginning July 1 and ending June 30.

Adopted August 25, 2020 Certified to be the Amended and Restated By-Laws of the Rivanna Water and Sewer Authority, duly adopted by the Board at a meeting at which all members of the Board were present on November 15, 2022.

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		N .
		Name: Office:

<u>101354819.4</u>

Remote Participation Policy and Amended and Restated By-Laws

Presented to the Boards of Directors

By: Bill Mawyer, Executive Director

November 15, 2022





In September 2022, the Code of Virginia authorized the following for certain public bodies, after adoption of a Remote Participation Policy:

A. Individual Members of a public body may use remote participation if the Member notifies the Chair in advance of the meeting that:

- 1. The Member has a temporary or permanent disability or other medical condition that prevents the Member's physical attendance;
- 2. A medical condition of a member of the Member's family requires the Member to provide care that prevents the Member's physical attendance;
- 3. The Member's principal residence is more than 60 miles from the meeting location identified in the required notice for such meeting; or
- 4. The Member is unable to attend the meeting due to a personal matter and identifies with specificity the nature of the personal matter. However, the Member may not use remote participation due to personal matters more than two meetings per calendar year or 25 percent of the meetings held per calendar year rounded up to the next whole number, whichever is greater.

The public body must approve remote participation by a Member, and the facts must be included in the meeting minutes.

B. All-Virtual public meetings with the following conditions:

- 1. An indication of whether the meeting will be an in-person or all-virtual public meeting is included in the required meeting notice along with a statement notifying the public that the method by which a public body chooses to meet shall not be changed unless the public body provides a new meeting notice in accordance with the provisions of § 2.2-3707;
- 2. Public access to the all-virtual public meeting is provided via electronic communication means;
- 3. The electronic communication means used allows the public to hear all Members of the public body participating in the all-virtual public meeting and, when audio-visual technology is available, to see the Members of the public body as well;
- 4. A phone number or other live contact information is provided to alert the public body if the audio or video transmission of the meeting provided by the public body fails, the public body monitors such designated means of communication during the meeting, and the public body takes a recess until public access is restored if the transmission fails for the public;
- 5. A copy of the proposed agenda and all agenda packets and, unless exempt, all materials furnished to Members of a public body for a meeting is made available to the public in electronic format at the same time that such materials are provided to Members of the public body;

B. All-Virtual public meetings with the following conditions:

- 6. The public is afforded the opportunity to comment through electronic means, including by way of written comments, at those public meetings when public comment is customarily received;
- 7. No more than two Members of the public body are together in any one remote location unless that remote location is open to the public to physically access it;
- 8. If a closed session is held during an all-virtual public meeting, transmission of the meeting to the public resumes before the public body votes to certify the closed meeting as required by subsection D of § 2.2-3712;
- 9. The public body does not convene an all-virtual public meeting (i) more than two times per calendar year or 25 percent of the meetings held per calendar year rounded up to the next whole number, whichever is greater, or (ii) consecutively with another all-virtual public meeting; and
- 10. Minutes of all-virtual public meetings held by electronic communication means are taken as required by § 2.2-3707 and include the fact that the meeting was held by electronic communication means and the type of electronic communication means by which the meeting was held. If a Member's participation from a remote location pursuant to this subsection is disapproved because such participation would violate the policy adopted, such disapproval shall be recorded in the minutes with specificity.

The By-Laws are proposed to be Amended and Restated to:

- 1. Incorporate the Remote Participation Policy into the By-Laws, including clarification that remote and virtual participation constitute being "present" for the meetings. Our By-Laws require all members to be present to amend the By-Laws.
- 2. Clarify the authority of the Executive Director to execute contracts and other instruments on behalf of the Authority.
- 3. Establish governance of Board meetings by Robert's Rules of Order, and the precedence for application of the Rules, By-Laws, and Articles of Incorporation.

Action Requested by Each Board

Approve the Resolutions to adopt the Remote Participation Policy and the Amended and Restated By-Laws, with both effective on November 15, 2022



RESOLUTION OF THE BOARD OF DIRECTORS OF THE RIVANNA SOLID WASTE AUTHORITY REGARDING ADOPTION OF REMOTE PARTICIPATION POLICY

NOVEMBER 15, 2022

WHEREAS, pursuant to Section 2.2-3708.3 of the Code of Virginia (the "Code"), the Rivanna Solid Waste Authority (the "Authority") has prepared a Remote Participation Policy (the "Policy"), describing the circumstances under which an all-virtual public meeting and/or remote participation will be allowed and the process the Authority will use for making requests to use remote participation, approving or denying such requests, and creating a record of such requests, and fixing the number of times remote participation for personal matters or all-virtual public meetings can be used per calendar year, said Policy being attached hereto as Exhibit A;

WHEREAS, Section 2.2-3708.3(D) of the Code requires that the adoption of the Policy by recorded vote at a public meeting; and

WHEREAS, the Board of Directors of the Authority (the "Board") deems it advisable and in the best interest of the Authority to adopt the Policy;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby authorizes, approves, adopts and ratifies the Policy in all respects.



RESOLUTION OF THE BOARD OF DIRECTORS OF THE RIVANNA SOLID WASTE AUTHORITY ADOPTING AMENDED AND RESTATED BY-LAWS

NOVEMBER 15, 2022

WHEREAS, the Board of Directors (the "Board") of the Rivanna Solid Waste Authority (the "Authority") has determined that it is in the best interests of the Authority to amend and restate the current By-Laws of the Authority, which were adopted and made effective as of August 25, 2020 (the "Current By-Laws"); and

WHEREAS, pursuant to Article VI of the Current By-Laws, the Board may amend, add to, alter, or repeal the Current By-Laws at any meeting of all of the Board, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting; and

WHEREAS, the Board deems it advisable and in the best interest of the Authority to amend and restate the Current By-Laws in order to conform language regarding remote participation in Board meetings in accordance with the Code of Virginia and the Remote Participation Policy of the Authority to be adopted on even date herewith, to clarify signing authority for contracts and other instruments of the Authority, and to make certain other procedural updates; and

WHEREAS, the Board has considered the proposed Amended and Restated By-Laws in the form attached hereto as Exhibit A (the "Amended and Restated By-Laws") and has determined that it is advisable and in the best interests of the Authority to amend and restate the Current By-Laws by adoption of the Amended and Restated By-Laws and to ratify, confirm and approve all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority;

NOW, THEREFORE, BE IT RESOLVED, that the Current By-Laws are hereby amended and restated in their entirety, and the Amended and Restated By-Laws attached hereto as Exhibit A are hereby adopted and ratified in all respects, effective immediately; and be it

FURTHER RESOLVED, that the Secretary of the Authority or any other proper officer of the Authority be, and each of them hereby is, authorized and directed to place the Amended and Restated By-Laws and this resolution in the minute books of the Authority; and be it

FURTHER RESOLVED, that all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority prior to the date of these resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority; and be it

FURTHER RESOLVED, that the proper officers of the Authority are, and each of them hereby is, authorized and directed to prepare, execute and deliver, or cause to be prepared, executed and delivered, any and all agreements, documents, certificates and instruments, and to take any and all such other actions as may be deemed necessary, desirable or appropriate, to carry out the purpose and intent of each of the foregoing resolutions; and be it

FURTHER RESOLVED, that any actions taken by such officers or directors prior to the date of these resolutions that are within the authority conferred by the foregoing resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority.

www.rivanna.org 📵

RESOLUTION OF THE BOARD OF DIRECTORS OF THE RIVANNA WATER AND SEWER AUTHORITY REGARDING ADOPTION OF REMOTE PARTICIPATION POLICY

NOVEMBER 15, 2022

WHEREAS, pursuant to Section 2.2-3708.3 of the Code of Virginia (the "Code"), the Rivanna Water and Sewer Authority (the "Authority") has prepared a Remote Participation Policy (the "Policy"), describing the circumstances under which an all-virtual public meeting and/or remote participation will be allowed and the process the Authority will use for making requests to use remote participation, approving or denying such requests, and creating a record of such requests, and fixing the number of times remote participation for personal matters or all-virtual public meetings can be used per calendar year, said Policy being attached hereto as Exhibit A;

WHEREAS, Section 2.2-3708.3(D) of the Code requires that the adoption of the Policy by recorded vote at a public meeting; and

WHEREAS, the Board of Directors of the Authority (the "Board") deems it advisable and in the best interest of the Authority to adopt the Policy;

NOW, THEREFORE, BE IT RESOLVED, that the Board hereby authorizes, approves, adopts and ratifies the Policy in all respects.

RESOLUTION OF THE BOARD OF DIRECTORS OF THE RIVANNA WATER AND SEWER AUTHORITY ADOPTING AMENDED AND RESTATED BY-LAWS

NOVEMBER 15, 2022

WHEREAS, the Board of Directors (the "Board") of the Rivanna Water and Sewer Authority (the "Authority") has determined that it is in the best interests of the Authority to amend and restate the current By-Laws of the Authority, which were adopted and made effective as of August 25, 2020 (the "Current By-Laws"); and

WHEREAS, pursuant to Article VI of the Current By-Laws, the Board may amend, add to, alter, or repeal the Current By-Laws at any meeting of all of the Board, provided that notice of the proposed amendment, additions, alteration or repeal is given in the notice of such meeting and that all members of the Board are present at such meeting; and

WHEREAS, the Board deems it advisable and in the best interest of the Authority to amend and restate the Current By-Laws in order to conform language regarding remote participation in Board meetings in accordance with the Code of Virginia and the Remote Participation Policy of the Authority to be adopted on even date herewith, to clarify signing authority for contracts and other instruments of the Authority, and to make certain other procedural updates; and

WHEREAS, the Board has considered the proposed Amended and Restated By-Laws in the form attached hereto as Exhibit A (the "Amended and Restated By-Laws") and has determined that it is advisable and in the best interests of the Authority to amend and restate the Current By-Laws by adoption of the Amended and Restated By-Laws and to ratify, confirm and approve all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority;

NOW, THEREFORE, BE IT RESOLVED, that the Current By-Laws are hereby amended and restated in their entirety, and the Amended and Restated By-Laws attached hereto as Exhibit A are hereby adopted and ratified in all respects, effective immediately; and be it

FURTHER RESOLVED, that the Secretary of the Authority or any other proper officer of the Authority be, and each of them hereby is, authorized and directed to place the Amended and Restated By-Laws and this resolution in the minute books of the Authority; and be it

FURTHER RESOLVED, that all contracts and other instruments of the Authority signed by the Chair or the Executive Director of the Authority prior to the date of these resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority; and be it

FURTHER RESOLVED, that the proper officers of the Authority are, and each of them hereby is, authorized and directed to prepare, execute and deliver, or cause to be prepared, executed and delivered, any and all agreements, documents, certificates and instruments, and to take any and all such other actions as may be deemed necessary, desirable or appropriate, to carry out the purpose and intent of each of the foregoing resolutions; and be it

FURTHER RESOLVED, that any actions taken by such officers or directors prior to the date of these resolutions that are within the authority conferred by the foregoing resolutions are hereby ratified, confirmed and approved in all respects as the act and deed of the Authority.

MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY

BOARD OF DIRECTORS

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: STRATEGIC PLAN 2023

DATE: NOVEMBER 15, 2022

The attached Strategic Plan has been updated to include recommendations from the Board during the September meeting. The updated plan includes additional metrics to assess our progress in attaining the strategies and measures. An enhanced focus on communications and collaboration with our local and regional partners, along with our community, has also been added.

I will provide a brief review of these updates during our meeting. Implementation of the strategies will begin in January 2023. Periodic updates will be provided to the Board.

Board Action Requested:

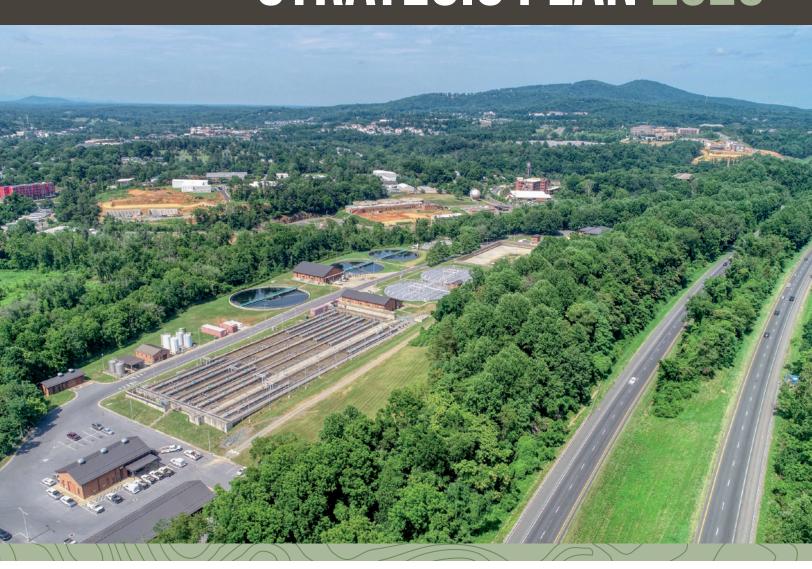
Approve the proposed Strategic Plan 2023.

Attachment



RIVANNA WATER AND SEWER AUTHORITY & SOLID WASTE AUTHORITY

STRATEGIC PLAN 2023





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MESSAGE FROM THE EXECUTIVE DIRECTOR

INTRODUCTION

2

TRENDS

Community Profile

Process

Population and Community
Regulations and Environmental Impacts
Workforce Shifts
Technology and Risk Profile

SOAR

Strengths
Opportunities
Aspirations
Results

STRATEGIC DIRECTION

Vision, Mission, Values
Priorities
Strategic Framework
Objectives and Strategies





MESSAGE FROM THE EXECUTIVE DIRECTOR The Rivanna Authorities have continued to improve the water, wastewater, refuse and recycling services we provide for our community since our most recent Strategic Plan was crafted in 2018.

Through the engagement and professionalism of our staff, and with support from our Boards of Directors, our culture of continuous operational and safety improvements has flourished over the last five years. With guidance from our Strategic Plan, development of our workforce has increased, the operational effectiveness of our programs has improved, and the master planning and construction of our infrastructure has grown in a financially responsible manner. Despite the unthinkable pandemic endured in 2020, our workforce has persevered at our work sites to provide uninterrupted services 24/7/365 to support our community. Throughout this challenging period, our Strategic Plan has helped us visualize and prioritize our course moving forward.

Our opportunities will continue with the 2023 update to our five-year Strategic Plan. Successful completion of our environmental stewardship goals will remain constant, while a heightened focus on sustainability and strategic workforce planning with diversity, equity and inclusion will help us to strengthen our team and continue our legacy of successful service.

William I. Mawyer, Jr., PE

W. Amawyling

Executive Director

Rivanna Water and Sewer Authority and Rivanna Solid Waste Authority

2 THE RIVANNA AUTHORITIES

INTRO

Building on the success achieved in its 2018 Strategic Plan, the Rivanna Authorities (Rivanna) initiated an update to its plan in 2022. The strategic framework presented in this document will help guide investment, allocate resources, and provide a structure for annual reviews to assure that long-term goals and objectives are achieved.

PROCESS

RIVANNA'S STRATEGIC PLANNING PROCESS WAS DESIGNED TO ENSURE:

- A shared vision of Rivanna's ultimate priorities. Organizations driven by clear purposes and shared values have a greater capacity to succeed than those that are not. Rivanna's strategic planning process was inclusive, with opportunities for participation by the Boards of Directors, employees, and external stakeholders.
- A collective understanding of the available resources, the environment, and the principles upon which strategies will be based. One key element of the strategic planning approach included the need to focus on short-term goals that will support a long-term vision.
- Acceptance of the direction and urgency of the strategic and operating plans, which will be integrated into the way Rivanna is operated on a day-to-day basis. From an implementation standpoint, it was very important for the plan to have clear alignment with the people and roles necessary to ensure accountability and progress on each of the strategic priorities.

TO ACHIEVE THESE CONDITIONS FOR SUCCESS,

Rivanna's strategic planning process involved input from a broad group of internal and external stakeholders and involvement of more than 85 employees in the strategy development process.

Major elements of the process included:

Kick-off Workshop

• The Core Team met to review the implementation progress and process used with the 2018 Strategic Plan. The group discussed accomplishments, where work was still underway, and what some of the focus areas might be for continued success in the future.

Stakeholder Engagement

• Input was obtained from Board members, employees, and external stakeholders through a combination of interviews, an online employee survey, facilitated sessions, and three employee focus groups.

Foundation Workshop

• The Core Team met to consider stakeholder input and to update the organization's Vision, Mission, Values, and Priorities.

Strategy Workshop

• The Core Team made preliminary decisions concerning the measures and strategies to be included in the final plan.

COMMUNITY PROFILE

The Rivanna Water and Sewer Authority was created in 1972 by the City of Charlottesville (City) and Albemarle County (County) to provide wholesale water supply, water treatment, and wastewater interception and treatment for the City and County. In 1990, the Rivanna Solid Waste Authority was created by the City and County to assume operation of the existing Ivy Landfill, which later closed in 1998. While the Water and Sewer Authority has two main customers two main customers [the City and Albemarle County Service Authority (ACSA)], the Solid Waste Authority currently provides recycling, refuse, and household hazardous waste disposal services for more than 20,000 City and County residents and businesses each month.



The Authorities are located in central Virginia. Charlottesville is surrounded by Albemarle County, but the City and County are two separate entities. According to the US Census Bureau, both the City and the County have experienced significant population growth over the last several decades. The City's population increased by 15% or 6,212 residents between 1990 and 2020 to 46,553, but dropped slightly in 2021 to 45,672. The County has increased by 65% or by 44,355 residents over the last 30 years, for a total population of 113,535 in 2021. The median household income in the City is \$59,598, which is lower than both that of the County (\$84,643) and the national median (\$67,521), according to the US Census. The average unemployment rate for the Charlottesville Metropolitan Statistical Area was 3.4% in 2021, which is almost 2% lower than the national average. In 2021, Livability.com ranked Charlottesville as the 5th best city to live in America.

The largest regional employers are the University of Virginia/UVA Hospital/UVA Medical Center, Albemarle County, the City of Charlottesville, Sentara Healthcare, and the US Department of Defense. The area has a rich cultural heritage, having been home to Presidents Thomas Jefferson, James Madison, and James Monroe, with the County housing Thomas Jefferson's estate, Monticello. Charlottesville's Downtown Mall is one of the longest outdoor pedestrian malls in the country, and the nearby Shenandoah National Park offers many recreational activities year-round.

TRENDS

POPULATION AND COMMUNITY

The population of Charlottesville (City) is stable with potential future growth on the horizon, while Albemarle County (County) has grown at a faster pace than the City. The University of Virginia (UVA) is also expanding, and there are new development projects for hotels, schools, and housing in the community. In general, utility service demands have not increased simultaneously with population growth. This trend is expected to change as opportunities for additional utility efficiencies decrease and regulatory requirements increase.

...utility service demands...are expected to change as opportunities for additional utility efficiencies decrease and regulatory requirements increase.

The regional political landscape is mostly stable, though turnover at partner organizations has made coordinating long-term water, sewer, and solid waste initiatives more challenging. The City, County, and UVA have been supportive of Rivanna's activities. and continue to work collaboratively on regional

utility and solid waste issues. While the Authorities are available as a resource, the City and ACSA generally take the lead on end-user engagement and outreach efforts.

From a service affordability standpoint, Rivanna closely manages its expenses to minimize negative financial impacts. Rivanna uses five- and ten-year rate models to project financial resource requirements on a rolling basis, but budgeting discussions are often political processes, as rising costs ultimately lead to end-user rate increases.

In the future, Rivanna will continue to balance infrastructure investment required to support growth in the region with financial constraints and service affordability.

REGULATIONS AND ENVIRONMENTAL IMPACTS

Rivanna's regulatory landscape is highly dependent on the political environment at the federal and state level. Remaining responsive to rapidly changing regulations impacts Rivanna's operations, capital planning, and organizational priorities. While emerging technology and innovative approaches can move quickly, Rivanna's planning efforts are evolving in response to changing regulatory conditions. Capital improvement project needs are expected to increase for the foreseeable future.

Public awareness and engagement is increasing, particularly around sustainability and reducing negative environmental impacts. Customers and stakeholders expect timely communication and responses, and national interest in PFAS, revisions to the Lead and Copper Rule, and updates to the Clean Water Act are driving local discussions. Rivanna has several environmental initiatives underway; for example, granular activated carbon has been incorporated into water treatment processes, which improves water quality by removing chemical contaminants and disinfection byproducts.

The uncertain regulatory environment is expected to remain, and Rivanna's associated expenses will continue to increase as new regulations are established at the federal and state levels. The organization is working to stay on top of industry trends and new technologies through professional associations, and will continue to educate, engage in conversations, adapt, and adhere to regulations. Rivanna is also focusing on data-driven decision-making and gathering baseline information to build appropriate sustainability goals and targets.



WORKFORCE SHIFTS

Rivanna maintains a professional and highly qualified workforce to support its infrastructure and operations. Like many similar organizations, Rivanna has needed to respond to workforce shifts as a result of the COVID-19 pandemic and

As of July 2022, the unemployment rate in Albemarle County is 2.7%.

the "Great Resignation." While Rivanna has generally been able to fill vacancies, certain positions are more challenging to attract a diverse pool of candidates and ultimately fill. As of July 2022, the unemployment rate in Albemarle County is 2.7%, which is lower than the state (3%) and national (3.6%) rates. Though unemployment rates in the surrounding area will likely remain low, Rivanna has had success in meeting its retention goals by being responsive to employee needs, offering development opportunities, and ensuring competitive compensation.

The average age of Rivanna's workforce has declined and gender diversity in the workforce has increased. Board members and external stakeholders are engaged and focused on diversity, equity, and inclusion, which will continue into the future.

TECHNOLOGY AND RISK PROFILE

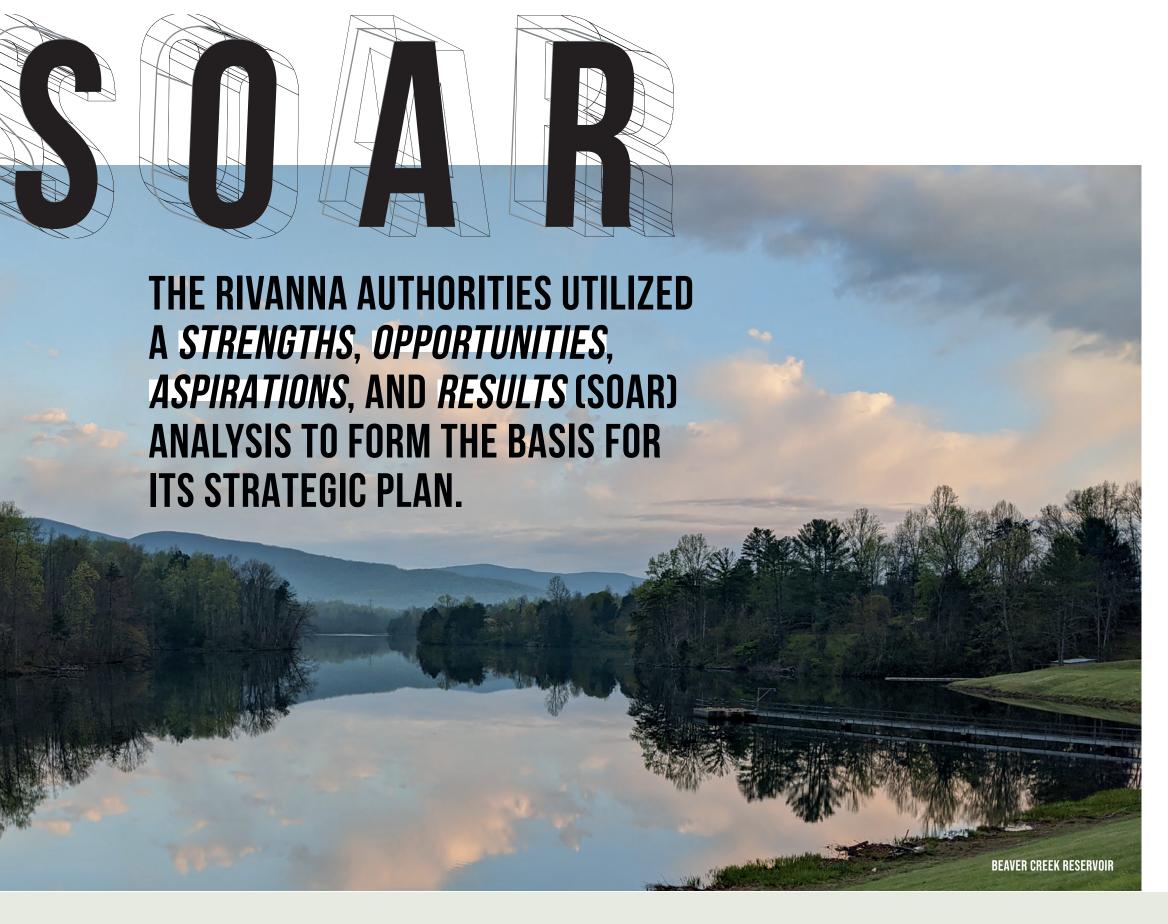
Rivanna must regularly respond to and mitigate risks, including shifting focus to address new or different risk drivers resulting from the COVID-19 pandemic. These risk drivers include public health, employee health, and supply chain concerns. Regionally, the focus on climate change mitigation and adaptation has increased over the last five years, as unpredictable and severe weather events are occurring at a greater frequency.

Cyber security risks are on the rise for municipal and public services organizations across the country...

Cyber security risks are on the rise for municipal and public services organizations across the country and were a major focus of America's Water Infrastructure Act (AWIA). In response to these threats, Rivanna has improved its cyber security posture, and continues to address aging infrastructure, devices, and network equipment challenges. Remaining vigilant against the on-going risk requires continuous technology systems updates and resources.

Rivanna's Supervisory Control and Data Acquisition (SCADA) system has expanded to exceed the number of people available to support the system, and both the volume and complexity of the data required are increasing. Currently, Rivanna relies on contractors to do initial SCADA programming, but contractors are also short-staffed.

6 THE RIVANNA AUTHORITIES 7





STRENGTHS

- Professional, Knowledgeable Workforce
- Excellent Product Quality
- Leadership and Organizational Culture
- Capital/Long-range Planning
- Responsive and Reliable
- Sufficient Resources (e.g., Financial, Operational, Internal Expertise)



OPPORTUNITIES

- Increased Regional Visibility
- Employee Recruitment and Retention
- Environmental Stewardship
- External Partnerships to Support Rivanna Goals (e.g., PVCC)
- Cohesive, Shared Vision for Solid Waste
- Organizational Focus on Diversity, Equity, and Inclusion



ASPIRATIONS

- Regional Leadership a Model for Others
- Excellent Workforce Development and Engagement
- Updated Facilities and Infrastructure
- Streamlined and Efficient Operations
- Stakeholder and Community Understanding



RESULTS

- Communication and Collaboration
- Environmental Stewardship
- Workforce Development
- Optimization and Resiliency
- Planning and Infrastructure

8 THE RIVANNA AUTHORITIES 2022 STRATEGIC PLAN 9

STRATEGIC BECTION

VISION

To serve the community as a recognized leader in environmental stewardship by providing exceptional water and solid waste services.

MISSION

Our knowledgeable and professional team serves the Charlottesville, Albemarle, and UVA community by providing high-quality water and wastewater treatment, refuse, and recycling services in a financially responsible and sustainable manner.

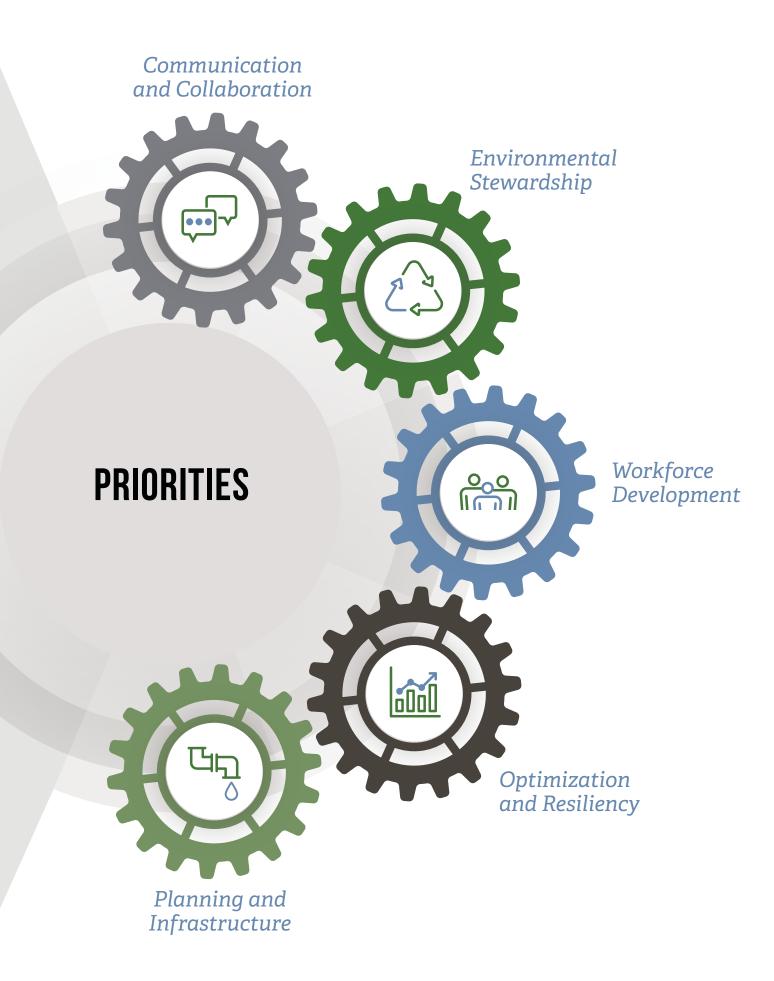
VALUES

INTEGRITY: We are open and transparent, lead by example, and are committed to ethical behavior

TEAMWORK: We work collaboratively to help each other succeed and serve the community

RESPECT: We treat our fellow employees, customers, business partners, and stakeholders with dignity and respect by embracing their diverse backgrounds and experiences

QUALITY: We deliver exceptional services and products, serve our community responsibly, and safeguard natural resources



10 THE RIVANNA AUTHORITIES 2022 STRATEGIC PLAN 11

framework

VISION

To serve the community and be a recognized leader in environmental stewardship by providing exceptional water and solid waste services

VALUES

The Rivanna Water and Sewer Authority and Rivanna Solid **Waste Authority** are committed to the following values:

- Integrity
- Teamwork
- Respect
- Quality

MISSION

Our professional team of knowledgeable and engaged personnel serve the Charlottesville, Albemarle, and UVA community by providing high quality water treatment, refuse, and recycling services in a financially and environmentally responsible manner



PRIORITIES



COMMUNICATION AND COLLABORATION

To elevate awareness of the Authorities' impact and value through proactive communication, effective partnerships, and community involvement.

ENVIRONMENTAL STEWARDSHIP



To demonstrate and promote best practices in sustainability, resources conservation, and environmental education.

WORKFORCE DEVELOPMENT



To attract, develop, and retain a professional, highly skilled, engaged, and diverse team.

OPTIMIZATION AND RESILIENCY



To empower a culture of innovative and collaborative thinking that advances efficient operational processes, technology modernization, and risk mitigation.

PLANNING AND INFRASTRUCTURE



To address evolving needs by planning, delivering, and maintaining dependable infrastructure and facilities in a financially responsible manner.

STRATEGIES

- Develop and share the Authorities' public-facing brand identity, supported by resources and organizational
- 2. Promote our team to the community for educational outreach and partnerships
- 3. Provide resources to foster involvement with our community and collaboration with our local and regional partners
- Enhance the Rivanna.org website to provide interactive and accessible information
- Develop and implement a social media strategy for the Authorities to increase on-line presence
- 6. Strengthen and broaden involvement with regional environmental groups, task forces, and committees
- 7. Identify, implement, and strengthen internal sustainability initiatives to address climate action goals; protect the environment and public health, and optimize resource use
- Enhance and maintain business practices to ensure equitable service provision, including the same tipping fees, for all solid waste customers
- 9. Develop a formal employee engagement and retention plan
- 10. Expand the Authorities diverse candidate sourcing avenues
- 11. Formalize strategic workforce planning for the Authorities, including expectations for performance, leadership. advancement and succession management

- 12. Develop avenues for employees to enable sharing of ideas and opportunities to increase efficiency
- 13. Expand the Standard Operating Procedure (SOP) inventory, conduct gap analysis, enhance SOPs through the use of templates and interactive media
- 14. Develop a cross-departmental awareness program to celebrate and share improvements and efficiency gains
- 15. Complete a disaster recovery center for all business systems
- 16. Expand training opportunities for employee safety education
- 17. Expand adoption and use of the asset management program
- 18. Increase capacity for knowledge sharing, analysis and planning to remain as nimble as possible in a dynamic and changing operating environment
- 19. Enhance long- and short-term project planning and delivery processes

- · Increase communications with the public 5% per year
- Heighten community awareness by enhancing the website to increase public engagement 5% per year
- Support community educational outreach events by increasing staff participation hours 2% per year
- · Expand community service initiatives. Increase employee community service hours 1% per year. Increase local and regional partnerships.
- Increase social media interactions 10% per year
- Increase staff participation with regional environmental groups 3% per year
- · Create a sustainability team to reduce the Authorities' carbon footprint 5% per year
- · Increase the number of facilities reviewed and plans developed to address climate and flood resiliency 5% per year
- · Maintain staff turnover rate of less than 10% per year
- · Increase sourcing resources 20% per year to recruit diverse candidates
- · Increase the number of employees participating in professional education and training 2% per year
- Update 20% of the job descriptions annually
- · Update a 5-year staffing master plan annually
- Expand SOPs in a document management format
- Increase the number of optimizations undertaken 5% per year. Measure associated process, volumetric or cost changes
- Increase hours of safety training per employee 1% per year to reduce the number of reportable and near-miss accidents
- Develop an Employee Operational Optimization Incentive Program
- Reduce the number of unplanned Critical System disruptions greater than 4 hours 10% per year
- Complete 90% of active projects on time and within budget
- · Increase the number of assets in the asset management system 5% per year
- Include 75% of the assets in the annual CIP/master planning effort





COMMUNICATION AND COLLABORATION

To elevate awareness of the Authorities' impact and value through proactive communication, effective partnerships, and community involvement.

Communication and collaboration is a key focus area for the Authorities. Fostering a culture that supports open communication and strengthens partnerships has been essential for regional projects, such as working with the County on public information dissemination and dam safety initiatives. The Rivanna Solid Waste Authority has increased its positive media coverage and advertising for special events, including the Oyster Shell program and Pumpkin Smash event. Additionally, Rivanna has leveraged regional relationships with other utilities and industry associations to implement best practices, and has worked to increase its brand exposure through the Riverfest, Fix a Leak, and Imagine a Day Without Water campaigns.

Existing strategies will be leveraged over the coming years to refresh and build awareness of the Authorities' brand identity and utilizing the organization's website to provide interactive and accessible information. Rivanna will continue to cultivate community engagement opportunities for employees with educational outreach, resources, and partnerships.

STRATEGIES

- Develop and share the Authorities' public-facing brand identity, supported by resources and organizational structure
- Promote our team to the community for educational outreach and partnerships
- Provide resources to foster involvement with our community and collaboration with our local and regional partners
- Enhance the Rivanna.org website to provide interactive and accessible information
- Develop and implement a social media strategy for the Authorities to increase on-line presence







To demonstrate and promote best practices in sustainability, resources conservation, and environmental education.

Rivanna has committed to maintaining and enhancing the long-term health of the community and environment by providing recycling education and hosting special collection days for household hazardous waste and electronic materials. To support efforts in exceeding regulatory requirements, the Authorities' have launched a greenhouse gas inventory pilot project and are working to develop a climate resilience and action plan.

A continued focus will involve building strategic partnerships with regional environmental groups. Additionally, Rivanna will lead internal initiatives to support sustainability participation and opportunities to reduce resource use and carbon footprint.

- Strengthen and broaden involvement with regional environmental groups, task forces, and committees
- · Identify, implement, and strengthen internal sustainability initiatives to address climate action goals; protect the environment and public health, and optimize resource use
- Enhance and maintain business practices to ensure equitable service provision, including the same tipping fees, for all solid waste customers



To attract, develop, and retain a professional, highly skilled, engaged, and diverse team.

The Authorities have made significant progress in the Workforce Development area since the 2018 Strategic Plan. Over that period, Rivanna has regularly updated its compensation and five-year staffing plan – an effort that recently included providing employees with a well-received cost-of-living adjustment. Additionally, progress has been made with identifying employee career paths, with this continuing to be a priority for leadership moving forward. Currently, Rivanna has an apprenticeship program in place that supports recruitment goals. A training and development program has been established with Piedmont Virginia Community College (PVCC) to focus on leadership training, CDL licensures, management coaching, and math tutoring for operators working to increase their certification levels. Rivanna will continue to invest in its employees with programs such as tuition reimbursement and implement other engagement opportunities to support retention initiatives.

Going forward, plans to support the workforce involve developing an employee engagement plan, which will allow leadership to conduct a gap assessment of employee-focused policies and review the organization's benefit plan to identify areas of improvement that align with retention efforts. Continued success in recruiting a strong workforce will require building awareness and promoting Rivanna as an employer of choice, as well as expanding the avenues and platforms used to reach potential employees. Formalizing the professional development process will help employees to understand performance expectations and career progression, while also strengthening the organization by formalizing avenues for knowledge transfer and succession planning.

STRATEGIES

- Develop a formal employee engagement and retention plan
- Expand the Authorities diverse candidate sourcing avenues
- Formalize strategic workforce planning for the Authorities, including expectations for performance, leadership, advancement and succession management



To empower a culture of innovative and collaborative thinking that advances efficient operational processes, technology modernization, and risk mitigation.

Efficiency and innovation across the organization has been a commitment that will continue into the future. For example, the Authorities' have developed a culture of safety by hiring a full-time Safety Manager, updating its safety manual, and providing more training centered on safety. Additionally, efforts to improve key business and operational processes such as document management and process flows have yielded greater operational efficiency. The Authorities have also taken advantage of favorable interest rates and refinanced bonds in support of effective financial management.

Over the next several years, Rivanna will continue to foster a work environment for employees to collaborate and increase efficiency by developing a cross-departmental program to pursue and celebrate innovation and performance improvements. Rivanna is also creating an SOP inventory and disaster recovery center for all business systems.

STRATEGIES

- Develop avenues for employees to enable sharing of ideas and opportunities to increase efficiency
- Expand the Standard Operating Procedure (SOP) inventory, conduct gap analysis, enhance SOPs through the use of templates and interactive media
- Develop a cross-departmental awareness program to celebrate and share improvements and efficiency gains
- Complete a disaster recovery center for all business systems
- Expand training opportunities for employee safety education



PLANNING AND INFRASTRUCTURE

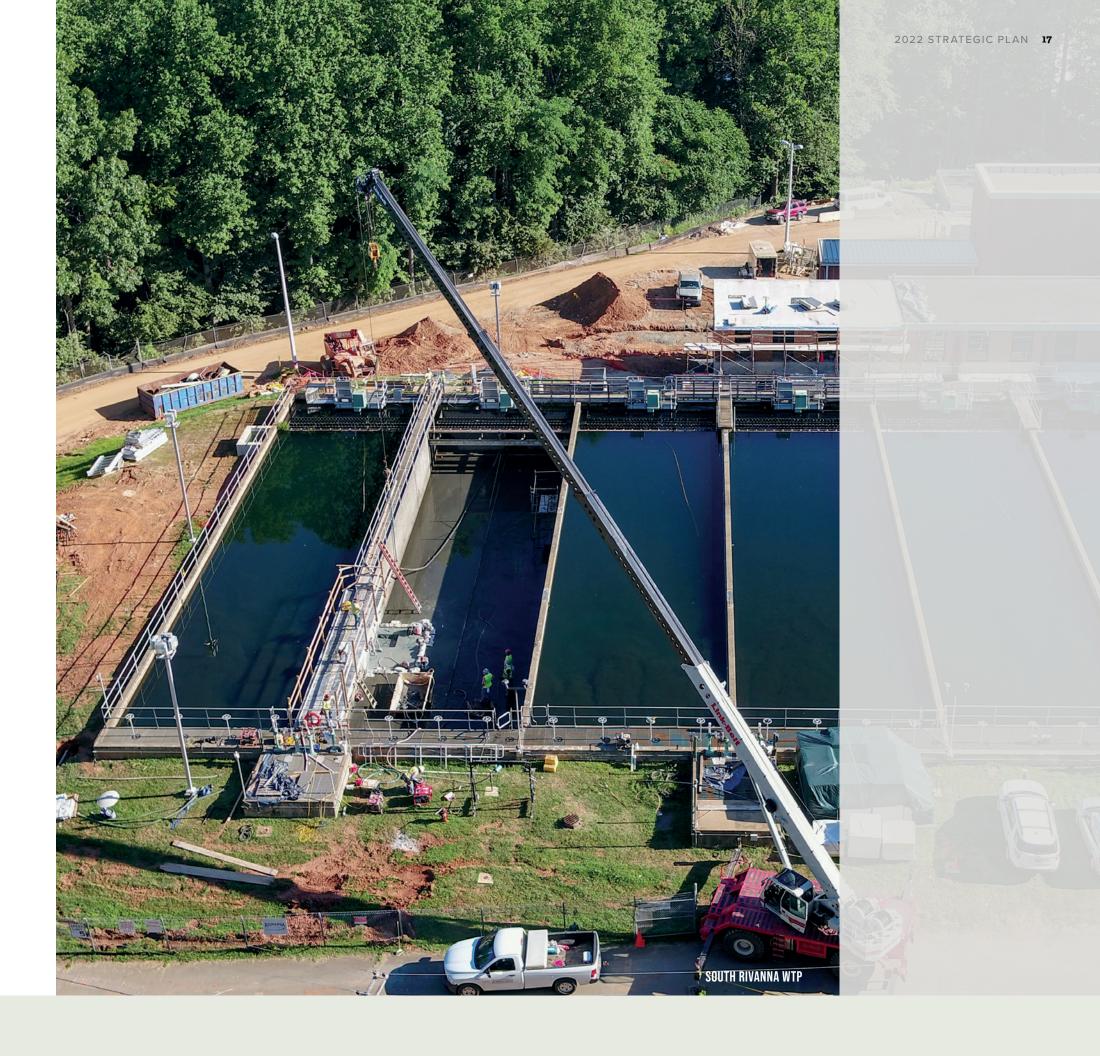
To address evolving needs by planning, delivering, and maintaining dependable infrastructure and facilities in a financially responsible manner.

Maintaining reliable infrastructure is a core function for the Rivanna Authorities. Over the last several years, the Authorities have created a strategic asset management plan, conducted a pilot for implementation, created a position to oversee asset management, and are now working to fully implement the Authorities' program. All of the Authorities' master plans have been updated and are now being evaluated on a five-year cycle, and the organization is in the process of implementing CityWorks to manage asset replacement and maintenance activities.

Existing initiatives will include expanding the adoption and use of the asset management program to enhance long-and-short-term project planning and delivery processes. Moreover, Rivanna will increase its capacity for knowledge sharing and analysis to support goals for maintaining dependable infrastructure.

STRATEGIES

- Expand adoption and use of the asset management program
- Increase capacity for knowledge sharing, analysis and planning to remain as nimble as possible in a dynamic and changing operating environment
- Enhance long- and short-term project planning and delivery processes



REALIZING THE VISION

Our vision is "To serve the community and be a recognized leader in environmental stewardship by providing exceptional water and solid waste services"

To make our vision a reality, we have created this plan, with the input of our staff and our external stakeholders, to ensure that we meet and exceed their expectations. Building on the momentum achieved through successful implementation of the 2018 Strategic Plan, Rivanna is committed to leveraging cross-functional teams, involving employees across the organization in strategic initiatives, and regularly communicating updates with its Boards of Directors, employees, stakeholders, and public.

Rivanna is grateful to all the individuals who took the time to provide input during this strategic planning process, and we look forward to sharing our progress and success as we work to achieve our strategic plan.



www.RIVANNA.org

695 Moores Creek Ln Charlottesville, VA 22902





Boards of Directors

By: Bill Mawyer, Executive Director

November 15, 2022



VISION, MISSION, VALUES

VISION

To serve the community as a recognized leader in environmental stewardship by providing exceptional water and solid waste services.

MISSION

Our knowledgeable and professional team serves the Charlottesville, Albemarle, and UVA community by providing high-quality water and wastewater treatment, refuse, and recycling services in a financially responsible and sustainable manner.

VALUES

INTEGRITY: We are open and transparent, led by example, and are committed to ethical behavior

TEAMWORK: We work collaboratively to help each other succeed and serve the community

RESPECT: We treat our fellow employees, customers, business partners, and stakeholders with dignity and respect by embracing their diverse backgrounds and experiences

QUALITY: We deliver exceptional services and products, serve our community responsibly, and safeguard natural resources

GOALS



COMMUNICATION AND COLLABORATION

To elevate awareness of the Authorities' impact and value through proactive communication, effective partnerships, and community involvement.



ENVIRONMENTAL STEWARDSHIP

To demonstrate and promote best practices in sustainability, resources conservation, and environmental education.



WORKFORCE DEVELOPMENT

To attract, develop, and retain a professional, highly skilled, engaged, and diverse team.



OPTIMIZATION AND RESILIENCY

To empower a culture of innovative and collaborative thinking that advances efficient operational processes, technology modernization, and risk mitigation.



PLANNING AND INFRASTRUCTURE

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STRATEGIES & MEASURES

STRATEGIES

COMMUNICATION AND COLLABORATION

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ENVIRONMENTAL STEWARDSHIP

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STRATEGIES & MEASURES

STRATEGIES



WORKFORCE DEVELOPMENT

- 9. Develop a formal employee engagement and retention plan
- 10. Expand the Authorities diverse candidate sourcing avenues
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OPTIMIZATION AND RESILIENCY

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STRATEGIES & MEASURES

STRATEGIES



PLANNING AND INFRASTRUCTURE

- 17. Expand adoption and use of the asset management program
- Increase capacity for knowledge sharing, analysis and planning to remain as nimble as possible in a dynamic and changing operating environment
- Enhance long- and short-term project planning and delivery processes

- Reduce the number of unplanned Critical System disruptions greater than 4 hours 10% per year
- Complete 90% of active projects on time and within budget
- Increase the number of assets in the asset management system 5% per year
- Include 75% of the assets in the annual CIP/master planning effort

QUESTIONS?

Board Action Requested:

Motion and Vote to Approve the proposed Strategic Plan 2023.





SAFETY PROGRAM UPDATE

for the RWSA/RSWA Boards of Directors

November 15, 2022 Presented by Liz Coleman, Safety Manager



Safety:

a continuous improvement process that protects staff and reduces the number of workplace deaths, injuries, and illnesses.

Part of Our Strategic Plan Goal of Operational Optimization Includes Safety.

"To efficiently, reliably, and <u>safely</u> provide high quality services, assuring the best value for our customers."

Safety Goal Strategies:

Enhance our culture of safety.

Protect our **workforce** and the public **through** continually growing a **culture of safety**.



SAFETY PROGRAM

- SAFETY MANUAL
- SAFETY TRAINING
- EQUIPMENT PURCHASES
- JOB PROCEDURES
- NEW EMPLOYEE
 ORIENTATION
- CONTRACTOR SAFETY
- EMERGENCY MANAGEMENT



Welcome to the Rivanna Authorities!

New Hire Safety Orientation Training Agenda

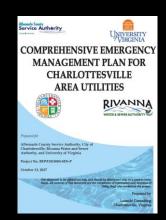
ADMINISTRATION DEPARTMENT TRAINING















SAFETY TRAINING NEEDS

- INDIVIDUAL TRAINING MATRICES FOR EACH DEPARTMENT INCLUDE:
 - ANNUAL REQUIRED TRAINING
 - PERIODIC REQUIRED TRAINING (EVERY 3 YEARS)
 - ANNUAL BEST PRACTICES

SAFETY TRAINING TAKES TIME

DEPARTMENT	SAFETY TRAINING ANNUAL HOURS PER EMPLOYEE	ALL TRAINING ANNUAL HOURS PER EMPLOYEE (COMPARABLE SIZED COMPANIES)	
Solid Waste	23.0	In 2021, 63.9 hours spent per employee	
Administration	17.3		
Engineering	22.8	each year for a small company.	
Laboratory	19.8	<u>U.S.: hours of training per</u> employee by company size	
Maintenance	27.7		
Wastewater	23.2	2021 Statista	
Water	26.7		



SAFETY TRAINING UPDATE

- 2021-2022 COMPLETED TRAINING
 - 2 HOUR HAZARDOUS CHEMICALS FOR MANAGERS
 - HEAVY EQUIPMENT TRAINING FOR SOLID WASTE
 - HANDS ON FIRE EXTINGUISHER TRAINING
 - CERTIFICATION FOR CONFINED SPACE, LOTO, FALL PROTECTION TRAINING
 - ARC FLASH TRAINING
 - OSHA 30 FOR INSPECTORS
 - OSHA ANNUAL TRAINING

PURCHASED EQUIPMENT AND GRANTS RECEIVED

- Spill Containment for Chemical Storage Drums
- New 55-gallon Drum Dollies

RWSA received \$4,000

- VRSA SAFETY EQUIPMENT GRANT
 - MANHOLE GUARD RAILS

RSWA received \$2,000

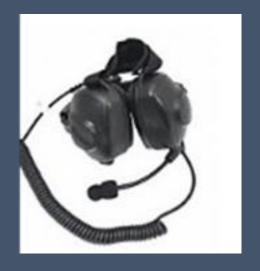
- VRSA SAFETY TRAINING GRANT
 - HEAVY DUTY HEARING PROTECTION HEADSET WITH RADIO COMMUNICATION

VRSA =VIRGINIA RISK SHARING ASSOCIATION

provides auto, property, liability and worker's compensation insurance for Rivanna Authorities.







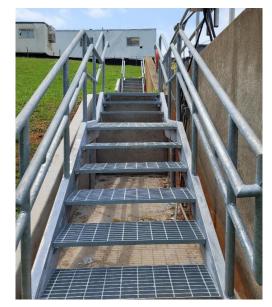
PROGRAM ENHANCEMENTS DUE TO EMPLOYEE SUGGESTIONS:

- Convex Safety Mirror at Ivy Material Utilization Center to view traffic.
- Steps replaced at South Rivanna Clarifier
- Smoke Detectors in Blower Building Breakroom and Sludge Pumping building workroom at Moores Creek Campus.











SAFE WORK PRACTICES: METHANE SPHERE INTERIOR INSPECTION

- METHANE SPHERE
 - VENTILATED FOR APPROXIMATELY 18 HOURS.
 - LEVELS OF METHANE CONTINUALLY MONITORED.
 - DRONE ENTRY FOR INSPECTION
 - VIDEO OF INSPECTION

SAFE WORK PRACTICES: LEAD PAINT ABATEMENT South Rivanna and Observatory Construction



Project/Test Address: South Rivanna WTP

Collection Date: 10/24/2022

Client Number: 201022

Laboratory Results

Lab Sample Number	Client Sample Number	Collection Location	Air Volume (L)	Total Meta (ug)
22-10-04023-001	102422FF-1	CLEAN ROOM	168	<2.00
22-10-04023-002	102422FF-2	PIPE GALLERY 506	170	<2.00
22-10-04023-003	102422FF-3	PIPE GALLERY 1&2	180	<2.00
22-10-04023-004	102422FF-4	FILTER ROOM	186	<2.00
22-10-04023-005	102422FF-5	EXTERIOR EXHAUST	174	<2.00
22-10-04023-006	102422FF-6	BLANK		<2.00



One Full Time Safety Manager

SAFETY PROGRAM RESOURCES

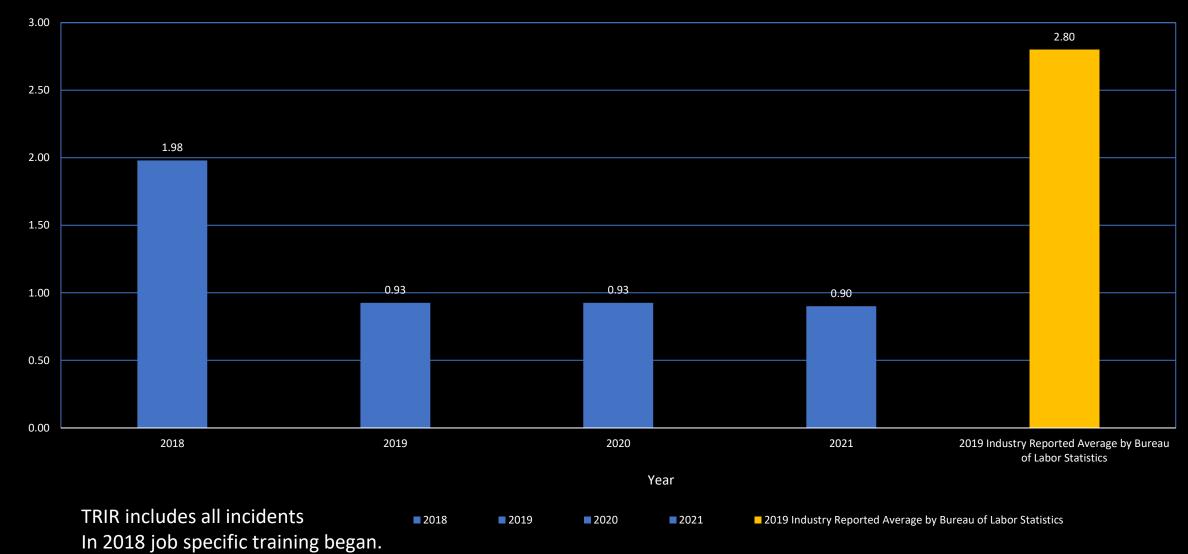
Staff Safety Committee

RWSA 2022-2023 Budget: \$103,180

RSWA 2022-2023 Budget: \$26,000

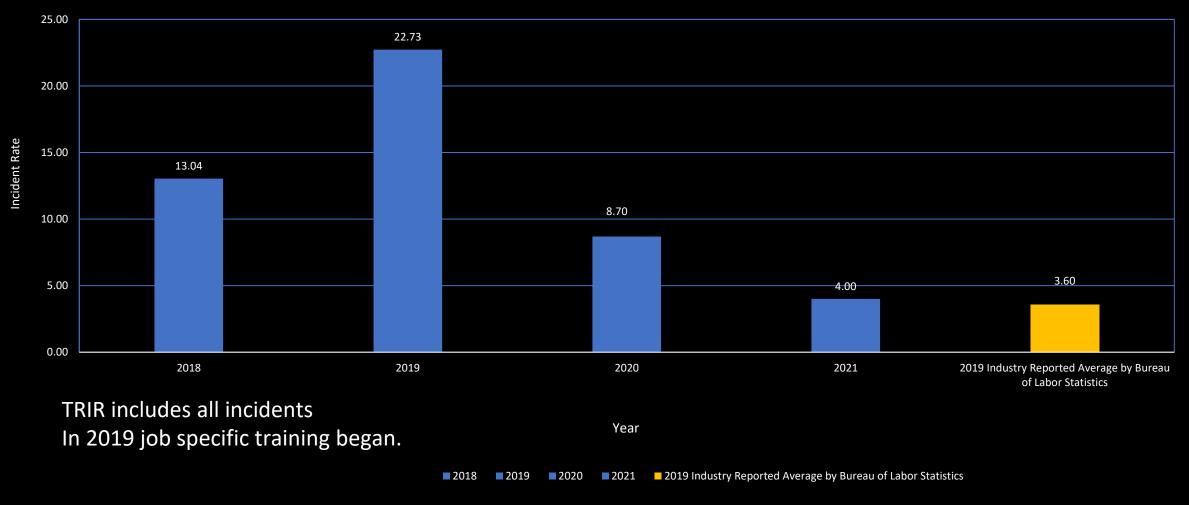
2022-2023 Grants Received: \$6,000

DECLINING RWSA INCIDENT RATES



Incident Rate

DECLINING RSWA INCIDENT RATES



IN SUMMARY

- Many safety program improvements have been completed.
- Continual Updates Are Needed To:
 - Protect our valuable human resources by providing a safe workplace.
 - Enhance our safety culture through safe work practices.
 - Maintain VOSH requirements and avoid noncompliance fines.





THANKS OUT

