RIVANNA

WATER & SEWER AUTHORITY

Board of Directors Meeting

March 23, 2021

2:15pm

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
434.293.8858
www.rivanna.org

BOARD OF DIRECTORS

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

DATE: **March 23, 2021**

LOCATION: **Virtually via ZOOM**

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

AGENDA

1. ***CALL TO ORDER***

2. ***STATEMENT FROM THE CHAIR***

3. ***MINUTES OF PREVIOUS BOARD MEETINGS***
   a. *Minutes of Regular Board Meeting on February 23, 2021*

4. ***RECOGNITION***

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

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

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

8. ***CONSENT AGENDA***
   a. *Staff Report on Finance*

   b. *Staff Report on Operations*

   c. *Staff Report on Ongoing Projects*

   d. *Staff Report on Wholesale Metering*

   e. *Award of Term Contract for On-Call Maintenance Construction Services*

   f. *Award of Term Contract – Reservoir Algal Management Services to Solitude Lake Management*

9. ***OTHER BUSINESS***
   a. *Presentation: Buck Mountain Property Update; Water Manager, Andrea Bowles*

   b. *Presentation: Drinking Water Treatment Update; Director of Operations, Dave Tungate*

c. *Presentation: Introduction of the FY 2021 - 2022 Operating Budget; Executive Director, Bill Mawyer*

10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA

11. CLOSED MEETING

12. ADJOURNMENT

GUIDELINES FOR PUBLIC COMMENT AT VIRTUAL RIVANNA BOARD OF DIRECTORS MEETINGS

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

Members of the public who submit comments will be recognized during the specific time designated on the meeting agenda for "Items From The Public." The comment(s) will be read aloud to the Board of Directors only during this agenda item, so comments must be received prior to the end of this agenda item. The comments will be read by the Rivanna Authority's Executive Coordinator/Clerk of the Board.

Members of the public requesting to speak will be recognized during the specific time designated on the meeting agenda for "Items From The Public." Each person will be allowed to speak for up to three minutes. When two or more individuals are present from the same group, it is recommended that the group designate a spokesperson to present its comments to the Board and the designated speaker can ask other members of the group to be recognized by raising their hand or standing. Each spokesperson for a group will be allowed to speak for up to five minutes.

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

- Submit your comment prior to the start of or during the "Items from the Public" section of the Agenda.
- In your comment, state your full name and address and your organizational affiliation if commenting for a group;
- Address your comments to the Board as a whole;
- State your position clearly and succinctly and give facts and data to support your position;
- Be respectful and civil in all interactions at Board meetings;
- The Board will have the opportunity to address public comments after the public comment session has been closed;
- At the request of the Chairman, the Executive Director may address public comments after the session has been closed as well; and
- As appropriate, staff will research questions by the public and respond through a report back to the Board at the next regular meeting of the full Board. It is suggested that commenters who have questions for the Board or staff submit those questions in advance of the meeting to permit the opportunity for some research before the meeting.

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

Rev. May 20, 2020

CALL TO ORDER

STATEMENT OF CHAIR TO OPEN MEETING

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

I would like to call the March 23, 2021 meeting of the Board of Directors to order.

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

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

ROLL CALL:

Mr. Boyles: Please state your full name and location.
Ms. Hildebrand: Please state your full name and location.
Mr. O'Connell: Please state your full name and location.
Dr. Palmer: Please state your full name and location.
Mr. Richardson: Please state your full name and location.
Mr. Snook: Please state your full name and location.

And I am Mike Gaffney and I am located at _____.

Joining us today electronically are the follow Authority staff members:

Bill Mawyer, Lonnie Wood, Jennifer Whitaker, David Tungate, Andrea Terry, John Hull, and Katie McIlwee

We are also joined electronically by Carrie Stanton, counsel to the Authority.

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RWSA BOARD OF DIRECTORS
Minutes of Regular Meeting
February 23, 2021

A regular meeting of the Rivanna Water and Sewer Authority (RWSA) Board of Directors was held on Tuesday, February 23, 2021 at 2:15 p.m. via Zoom.

Board Members Present: Mike Gaffney, Chip Boyles, Lloyd Snook, Dr. Liz Palmer, Jeff Richardson, Lauren Hildebrand, Gary O'Connell.

Board Members Absent: none.

Rivanna Staff Present: Bill Mawyer, Katie McIlwee, Lonnie Wood, Jennifer Whitaker, David Tungate, John Hull.

Attorney(s) Present: Carrie Stanton.

1. CALL TO ORDER
Mr. Gaffney called the February 23, 2021 regular meeting of the Rivanna Water and Sewer Authority to order at 2:16 p.m.

2. STATEMENT FROM THE CHAIR
Mr. Gaffney read the following statement aloud:

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

"I would like to call the February 23, 2021 meeting of the Board of Directors to order.

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

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

Mr. Gaffney called the roll.

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Mr. Chip Boyles (City Manager) stated he was located at Charlottesville City Hall in Charlottesville, VA.

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

Mr. O'Connell stated he was located at 168 Spotnap Road (ACSA Headquarters).

Dr. Elizabeth Palmer stated she was located at her home address of 2958 Mechum Banks Drive in Charlottesville, VA.

Mr. Jeff Richardson stated he was located at the County Administration Building at McIntire Road in Charlottesville, VA.

Mr. Lloyd Snook stated he was located at 408 East Market Street in Charlottesville, VA.

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

Mr. Gaffney stated the following Authority staff members were joining the meeting electronically: Bill Mawyer, Lonnie Wood, Jennifer Whitaker, David Tungate, John Hull, and Katie McIlwee.

Mr. Gaffney stated they were also joined electronically by Ms. Carrie Stanton, Counsel to the Authority.

Mr. Mawyer and Mr. Gaffney welcomed Ms. Stanton and Mr. Boyles to their first RWSA Board meeting.

3. MINUTES OF PREVIOUS BOARD MEETINGS

a. Minutes of Regular Board Meeting on January 26, 2021

Dr. Palmer moved that the board approve the minutes of the previous board meeting. The motion was seconded by Mr. O'Connell and passed unanimously (6-0). (Mr. Boyles abstained.)

4. RECOGNITIONS

There were no formal recognitions made.

5. EXECUTIVE DIRECTOR'S REPORT

Mr. Mawyer stated he wanted to recognize three Authority employees who have improved their professional qualifications by passing licensing exams given through the state. He stated Mr. Matthew Mitchell is now a Class I Water Operator, as well as Mr. Ron Dudash. He stated Mr. Robbie McMullen is a Class IV Wastewater Operator. He stated all three gentlemen passed their exams, and he would mention that Mr. Mitchell and Mr. Dudash are what he calls "homegrown" Class I Operators, and Class I is the highest level in the state's hierarchy of water operators. He stated one starts at trainee, then moves up from Class IV to Class I.

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Mr. Mawyer stated Mr. Mitchell came to the Authority a year and a half ago with no water operator license, and he has taken the initiative to take online courses and other training. He stated Mr. Mitchell has passed all the exams up to Class I. He stated Mr. Dudash came to the Authority with a Class III and in two years, he has taken the initiative to work hard and get his Class I Water Operator license, which is very valuable to the Authority and throughout the state. He stated the Authority appreciates these men, along with Mr. McMullen for putting forth the effort to get their licenses, which helps these water and wastewater operators and helps the Authority.

Mr. Mawyer stated the Authority gives their operators a 5% salary increase with each license that they pass, so they share the appreciation with them.

Mr. Mawyer stated regarding COVID vaccinations, the Authority has been coordinating with Blue Ridge Health District and the Vaccine Administration Management System to get vaccines. He stated about 70% of the Authority's staff indicated that they wished to get the vaccine and to date, about 40% of their staff have received the first shot, with a small group having received the second shot. He stated progress is being made on that.

Mr. Mawyer stated regarding the strategic plan goal for infrastructure and master planning, work continues on the Rivanna to Ragged Mountain Reservoir waterline. He stated for the 9.5 miles of alignment on which that they need easements and agreements, they have obtained a significant amount of it.

Mr. Mawyer stated the map on the screen was updated and had been shown in the past. He stated the black lines on the map had been obtained, either with an easement or an agreement. He stated only the colored lines were yet pending.

Mr. Mawyer stated much of what was left was in blue, which is the UVA Foundation. He stated the Authority is getting focused with the foundation on those properties. He stated they expect and hope to meet with the Albemarle County School Board in March to obtain the easement that goes behind Greer Elementary School in the Lambs Road area, which was shown on the map in the purple line. He stated the Authority is making progress on obtaining the easements and rights to get the pipe installed.

Mr. Mawyer stated the Authority has coordinated with UVA on their new Contemplative Commons Building, which will be built in the dell area of UVA near Emmett Street. He stated we have a waterline that runs adjacent to UVA's site, and the Authority is coordinating with them, as this might be a good time to upgrade that water pipe before the building is constructed.

Mr. Mawyer stated he was a party to a presentation that Sunday with other speakers for the League of Women Voters and talked about the water supply system.

Mr. Mawyer stated some Authority staff, including Ms. Andrea Bowles and Ms. Jennifer Whitaker, will participate in a webinar series with the County about stream health. He stated they are trying to stay active in the neighborhood and communicate on those topics.

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Dr. Palmer commented that she saw the count of participants at the League meeting at which Mr. Mawyer spoke, and it was actually 58, with eight of those being speakers. She stated she thought she would mention that this was a good turnout for Mr. Mawyer's time spent on a Sunday talking to the public.

6. ITEMS FROM THE PUBLIC

Mr. Gaffney opened the meeting to the public. He asked Mr. Hull if there were any members of the public present who wished to speak.

Mr. Hull replied that no one had indicated their wish to participate.

Mr. Gaffney closed Items From the Public.

7. RESPONSES TO PUBLIC COMMENT

As there were no items from the public, there were no responses.

8. CONSENT AGENDA

a. *Staff Report on Finance*

b. *Staff Report on Operations*

c. *Staff Report on Ongoing Projects*

d. *Staff Report on Wholesale Metering*

e. *Award of Engineering Services Term Contracts for Water and Sewer Consulting Services: Kimley Horn; Wiley/Wilson; Whitman Requardt & Associates*

Dr. Palmer moved that the board approve the Consent Agenda. The motion was seconded by Mr. O'Connell and passed unanimously (7-0).

9. OTHER BUSINESS

a. *Presentation: Introduction of the FY 2022-2026 Capital Improvement Plan*
Executive Director, Bill Mawyer

Mr. Mawyer stated it was his pleasure to present the proposed Capital Improvement Plan for FY 22-26, which starts on July 1.

Mr. Mawyer stated the Authority begins planning for most, if not all, of their projects with the strategic plan guidance. He stated infrastructure and master planning is one of their six strategic plan goals to plan, deliver, and maintain dependable infrastructure in a financially responsible way.

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Mr. Mawyer stated they have seen challenges in the country, notably in Texas where they have had misfortune and possibly did not have the infrastructure planning, delivery, or maintenance that they needed for abnormal weather conditions. He stated he was sure the board had read about it and had seen it in the news, but the drinking water system for half the state has been affected in Texas, and they have a boil water notice. He stated the electric system froze, and 4.5 million customers are out of power in Texas, with people waiting in line for water and other utilities.

Mr. Mawyer stated it is unfortunate for those in Texas, but in some ways, this is exactly what the Authority does not want to happen in our community. He stated this is why the Authority puts together and tries to execute its CIP which, for the next five years, includes 54 projects totaling $169.7 million. He stated the majority of those funds are allocated to the urban water system ($96 million); $40 million for the wastewater system; $29 million for the non-urban systems in Crozet, Scottsville, and Glenmore; and $5 million in shared projects, which are generally technology projects that serve both the water and sewer systems. He stated technology may be for asset management and security, both software and hardware.

Mr. Mawyer stated this is a five-year CIP that is $37 million greater than the CIP from the last five years (FY 21-25). He stated generally, that $37 million is because $31 million will come into the five-year window as a part of FY 26, so that has been planned for many years. He stated they are increasing the budget by $11 million for some existing projects. He stated they have added six new projects for a total of $9 million in the five-year CIP, but they completed $14 million in the last year. He stated this nets to the $37 million, which he would provide more details on if there were questions.

Mr. Mawyer stated they also plan to use cash reserves of $14.4 million to supplement the expenses. He stated they have planned new debt of about $129 million over the next five years.

Mr. Mawyer stated the chart on the screen provided a graphical indication of how the proposed FY 22-26 CIP compares to Rivanna's 20-year history. He stated they were above the line, but he would say that they have some offset of the 2020 CIP when they were below average, and they are rebounding to deal with deferred maintenance and replacement that needs to be completed in the system.

Mr. Mawyer stated they look further out than five years, and also look for the second five years (FY 27-31), where they project about $100 million in expenses. He stated further, in the third five years (FY 32-36), they project almost $53 million in expenses. He noted that as they get closer to these timeframes, it is likely that these budgets will increase. He stated their crystal ball tells them that this much in project costs are on the horizon, totaling over $300 million for the next 15 years.

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Mr. Mawyer stated the difference between this year's five-year CIP and last year's is that there were 16 projects that transitioned into the FY 22-26 CIP in FY 26, which totaled $31 million. He stated six projects were added to the CIP for $9 million, and they increased budgets for existing projects (about $11 million).

Mr. Mawyer noted that budgets increased for a few of the projects, and this is typically because the scope increased. He stated for example, the Ragged to Observatory Water Treatment Plant Pipe and Pump Station project had planned to be brought up Route 29 through Fontaine Avenue, and they have determined that they will have to go around the Fontaine Research Park and bore underneath Route 29 to get the pipe over to Observatory Treatment Plant, which was about a 1,500-foot extension. He stated this is an example of how a scope change can increase the budget. He stated the projects on the screen were typical projects, and they do not add up to the $11 million as there is a number of projects that experienced minor budget increases.

Mr. Mawyer stated as he mentioned, there were nine projects that were completed for $14 million. He stated collectively, this is about a $37 million increase to the five-year CIP, with the majority of it planned in FY 26.

Mr. Mawyer stated the major programs and projects that they support include renovations and upgrades to the water treatment plants of over $43 million, which are currently underway. He stated there are regulatory issues at the Crozet Wastewater Flow Equalization Tank to minimize any wastewater overflows, as wastewater is conveyed from Crozet back to Moores Creek. He stated there are lighting improvements at the Moores Creek facility to comply with County ordinances. He stated the Beaver Creek Dam Pump Station and Piping is a regulatory requirement to be able to pass more water through the spillway and improve the water control for that reservoir.

Mr. Mawyer stated in terms of redundancy and resiliency, the Authority will build the Airport Road Pump Station and piping to be able to more dependably get water to the northern part of the County.

Mr. Mawyer mentioned a central waterline that goes through the City to strength the water infrastructure in the City and better connect the Observatory Treatment Plant to the Pantops water tank. He also mentioned that there is another water line crossing of the South Rivanna River.

Mr. Mawyer noted that he has the South Rivanna to Ragged Mountain Pipeline in two places on the chart on the screen, which was about $80 million in total. He stated he split it because it is a substantial redundancy and resiliency project and has a growth component as well. He stated that

out of the $80 million, he allocated $40 million to each of those two purposes so that there is no confusion about that.

Mr. Mawyer stated there are a number of projects for operation and maintenance at Moores Creek as they try to keep the plant running dependably and make security enhancements throughout the facilities. He stated they potentially have growth issues with the Schenks Branch interceptor pipe that needs to be upgraded, as well as potential future growth in the Moores Creek administrative building.

Mr. Mawyer stated there is a lot of master planning being done with urban water planning and planning for the wastewater facilities. He stated asset management is key to help them keep control of their many assets, when they need maintenance, and when they need to be replaced, along with their information technology systems.

Mr. Mawyer stated the biggest part of the CIP is driven by the Community Water Supply projects that were decided upon almost ten years ago, when the community had a drought in the early 2000s and decided it had to increase its water supply. He stated as he has talked about recently, the South Rivanna Water Treatment Plant is currently under renovation. He stated the Observatory Water Treatment Plant renovation started last week and will continue for two years. He stated the cost was $43 million for those two renovations.

Mr. Mawyer stated thirdly, there is the Ragged to Observatory pipeline where they will replace the raw waterlines that take water from Ragged Mountain Reservoir to the Observatory Treatment Plant. He stated in addition, they will build the pump station that is in the middle of that line, which is a dual purpose pump station. He stated it will take water from Ragged and pump it to Observatory. He stated additionally, it will take water from Ragged Mountain and pump it back to the South Rivanna Treatment Plant after they get the South Rivanna to Ragged raw waterline completed.

Mr. Mawyer stated the South Rivanna to Ragged raw waterline is the major project in this plan (shown as Project #5 on the screen). He stated the capstone project is to raise the water level in the Ragged Mountain Reservoir by 12 feet and add 700 million gallons of water to the reservoir.

Mr. Mawyer stated the Central Waterline project includes a pipe that will be located through the center of the City, more or less. He stated the Authority is meeting with Ms. Hildebrand and Mr. O’Connell about where that pipe might be located.

Mr. Mawyer stated that collectively, these projects will be $161 million. He stated they will result in a 100-year water supply that the community can depend on.

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Mr. Mawyer stated he mentioned that Project #5 was the major project in the Community Water projects. He stated he had a drone video to show the board the aerial view of the alignment. He played the video for the board.

Mr. Mawyer stated he hoped the video gave the board a good overview of where the Rivanna to Ragged Pipeline will be built, the alignment, and the properties and roads and how this will work out in reality.

Mr. Mawyer stated there are six new projects in the FY 22-26 budget. He stated Project #1 on the screen was the most significant, which is that they are proposing to build a section of the Rivanna to Ragged waterline between the Birdwood Golf Course (where they already have a pipe) and to go over along the Weeden and JPA Tower's property line to Old Garth. He stated there are plans for private development in that area, and the Authority wants to get its pipe in place before the private development begins. He stated this is proposed for FY 22-24.

Mr. Mawyer stated plate settlers are used in the settling process at the water treatment plants and are proposed for the South Rivanna Water Treatment Plant. He stated the Authority has had such good success with these plate settlers that were installed in 2020 at the Crozet Water Treatment Plant that they feel they need to optimize their settlement treatment process and add them at South Rivanna. He stated this is not proposed until 2026-2028.

Mr. Mawyer stated Scottsville Water Treatment Plant is an older facility, built in 1964. He stated the Authority sees close to $11 million in renovations that are needed at that facility. He stated these would be completed between FY 26 and FY 29.

Mr. Mawyer stated at Red Hill Water Treatment Plant, a small project is proposed to add space in the building for additional chemical treatment and lab equipment in that facility. He stated they have added pH adjustment and fluoride as additional chemical treatments for the water.

Mr. Mawyer stated this is the only well system they have, where they bring water out of the ground and treat it to the same level that they treat all of their other water from the treatment plants. He stated the Red Hill water is treated to the same level of quality, with the exception that they do not have GAC filtration at Red Hill. He stated otherwise, they felt it was important that the water in the Red Hill system comply with the same standards as all the rest of their water treatment plants.

Mr. Mawyer mentioned Project #5 on the screen. He stated the board may recall that the Moores Creek equalization basins were recently drained, and the basins were cleaned out of sludge that had been there for decades. He stated now that they are cleaned, the Authority found concrete

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repairs that they would like to get started on to correct those concrete spalls before a sludge accumulates in those basins again.

Mr. Mawyer stated lastly, there are some digestors that digest the solid product from the wastewater treatment process and kill the pathogens. He stated there have been leaks of methane gas, and the Authority is looking at making significant repairs to those facilities.

Mr. Mawyer stated that in the current five years, there is $8.9 million included for these new projects, and the projects would add up to $25 million in the ten-year CIP window.

Mr. Mawyer stated the slide on the screen showed one of the new projects that he talked about, which is connected to the north end of the Birdwood pipe that has already been installed. He stated they would bore underneath Route 250, as was indicated on the screen. He stated they would then excavate along the property line between the Weeden Center and what used to be the Piedmont Tractor facility, going to the north. He stated they would bore under the railroad tracks and Old Garth Road, over to the UVA Foundation property to the north.

Mr. Mawyer stated this is about 1,200 feet, and a budget of about $2 million. He stated RWSA would like to get started on that right away so that they get ahead of any development that the other two private owners have on both sides of the property.

Mr. Mawyer stated there is an ongoing project at Sugar Hollow to replace the rubber gate that sits on top of the dam. He stated this is currently under construction.

Mr. Mawyer stated the Crozet Flow Equalization Tank is under construction. He stated the tank stores wastewater during rain events that could potentially overflow the system. He stated they take the wastewater out and store it in what is going to be a concrete tank, as shown on the slide, which is about 40 feet tall and 65 feet in diameter. He stated this is located in the “V” between Route 250 and Route 240. He stated it serves the Crozet community, as all of the Crozet wastewater is piped back to Moores Creek for treatment. He stated Crozet is a part of the urban wastewater system.

Mr. Mawyer stated he mentioned the Moores Creek lighting project, and he presented a drone photo of what Moores Creek looks like at night. He stated when they finish this project, they will get a photo of the “after” lighting improvements to hopefully see the difference. He stated one piece of good news is that while they thought the project could cost close to $2 million, they now feel it will be below $1 million.

Mr. Mawyer stated at Airport Road, they acquired property a couple years ago, and they will build a finished water pumping station that will supply water to the northern end of the County.

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He stated it eliminates the need for a temporary pump that they would have to put at Kohl's every time there is a problem with the water system in the area.

Mr. Mawyer stated Beaver Creek has a major project of about $27 million to make improvements to the spillway and the raw water pump station. He stated what was shown on the slide was the proposed labyrinth spillway through the dam, with a bridge on Browns Gap Turnpike. He stated the concrete structure, similar to what was shown in the picture, would be built through the dam, with a bridge going across Browns Gap Turnpike. He stated RWSA is working closely with the federal government in the hopes that they will provide up to 65% of the funding for this project.

Mr. Mawyer stated they have to move the existing raw water pump station. He stated the map on the slide showed six sites that RWSA is reviewing for a location for the new pump station. He stated Site 3 is the one they have the most interest in, but that is the one that they have received a lot of feedback from the neighbors on, as the neighbors prefer they not go there. He stated they are still evaluating those alternatives.

Mr. Mawyer presented two graphs on a slide. He stated the graph to the right, which he believed the board had seen before, showed that around 2030, the RWSA's debt service decreases and provides some capacity for them to add the $129 million in additional debt.

Mr. Mawyer stated in summary, there are 54 projects at about $169.7 million. He stated they are using some cash reserves and would need to acquire new debt of $129 million. He stated for the most interest for the City and ACSA, the numbers on the screen included the charge increases from Rivanna that they project. He stated as a reminder, in FY 21, they had zero charge increases for both the City and the ACSA. He stated they have a bit larger than normal in FY 22, then get back to more level rates that one would expect (with the City in the 7% range, and ACSA in the 8% range).

Mr. Mawyer stated RWSA met with Mr. O'Connell, Ms. Hildebrand, and their staff to review the draft CIP in December 2020.

Mr. Mawyer concluded his presentation and offered to answer any questions. He asked Ms. McIlwee to pull up the slide for the Red Hill station. He stated he mentioned that Red Hill is a project that RWSA wants to start on right away. He presented a picture of the Red Hill Water Treatment Plant, as it is called now. He stated it used to be called a pump station, but it does take water out of the ground, and treat it to drinking water standards before pumping it to customers.

Mr. Mawyer stated the picture on the slide showed all the equipment they have in a small building. He stated this is a new project proposed, which is to put an addition on the building to

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provide more space for treatment equipment. He stated much of the equipment is remote-controlled, but an operator has to visit this facility every day, seven days a week, to make sure the chemicals are being injected properly and that the equipment is calibrated. He asked the board if there were any questions.

Dr. Palmer stated she had other questions, but one specifically about Red Hill. She asked when they started adding fluoride, adding that she assumed they have always added a little chlorine. She asked Mr. Mawyer to talk about the history of that.

Mr. Mawyer replied that it was operated by the ACSA from the beginning until about two years ago. He stated in talking with Mr. O'Connell, the discussion was that water treatment is RWSA's specialty, and so they should be the water treatment operators for this facility. He stated particularly, there was discussion of adding a chemical for pH adjustment, which is the acidity of the water, and that further, this water should be fluoridated just like the water from all of the other treatment plants, along with chlorine as disinfectant.

Mr. Mawyer stated some of the board members may know that this was the result of a leaking underground storage tank in the area that apparently caused concern or pollution of a number of private wells on Red Hill Road and over to Red Hill Elementary School. He stated this facility was built, and although RWSA owned it, ACSA operated it for a number of years, ironically. He stated RWSA took it over about two years ago. He stated they wanted to provide the same level of water treatment in the pH adjustment and fluoridation as they provide for all of the water they produce at the other treatment plants.

Dr. Palmer stated when they first took this up, she recalled that it was 11 homes. She asked if it is still the same number of homes, plus the school.

Mr. Mawyer replied yes.

Mr. O'Connell stated that when they did the switchover, they sent letters to and had conversations with almost every customer, including the schools, about the change and what it would mean to the water quality. He stated they sent notices to people and tried to do their best to make sure that they knew about the changeover and what it would mean. He stated they have better water quality in the area because of this change.

Dr. Palmer stated she had questions on other things, and she did not know if she should jump in.

Mr. Gaffney asked her to go ahead.

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Dr. Palmer stated that on the South Fork to Ragged Mountain Reservoir line, she thinks it is wonderful that a portion of the cost of this was put into resiliency and redundancy and another portion of it into growth. She asked Mr. Mawyer if he could talk about how he portioned those, or if there was something specific behind that.

Mr. Mawyer replied that there was no calculation. He stated he split it half and half, with $40 million going to each of those two categories.

Dr. Palmer stated she knew the sedimentation basin that was required with that line was a big portion of the cost of that, and that the Authority knows much more now about operations and has other thoughts on how to operate the system. She asked Mr. Mawyer for an update on that.

Mr. Mawyer replied that a significant cost (around $15 million of the $80 million) was originally envisioned for a pretreatment facility to take sediment and nutrients out of the raw water before they pump it from Rivanna Reservoir to Ragged Mountain Reservoir. He stated somewhat spurred by the strategic goal of optimization, RWSA is taking another look at how they can use operational optimization to minimize, if not even avoid, this pretreatment facility. He stated they are doing a study.

Mr. Mawyer stated RWSA has to produce drinking water every day, and so after a rain, if the water in the Rivanna Reservoir is muddy, they have to treat it to drinking water standards or above. He stated they do not have to do this to pump water from the Rivanna Reservoir to Ragged Mountain. He stated they can discern days when the water quality is much higher naturally, and the water coming into the Rivanna Reservoir is clear and clean. He stated those are the days that they should pump to Ragged, not when the water is full of sediment.

Mr. Mawyer stated this pretreatment study is taking a look at the water quality that is in the reservoir, and how many days they would have high-quality, sediment-free, nutrient-minimal water that they can pump to Ragged and either have minimum pretreatment or, possibly, no pretreatment. He stated they will see if this holds true. He stated if they can strategically operate the system and pump to Ragged when the water is clear and clean, they then minimize any treatment process and the cost of the system.

Mr. Mawyer stated a consultant is doing the study now, and they will finish in about a year, with some data on how many days per year there would be water that they recommend be pumped to Ragged Mountain and what the necessary treatment level would be. He stated they are trying to have minimal treatment, as needed, in combination with technology and operational optimization.

Dr. Palmer noted that after the new project of the 1,200 feet from the Birdwood Golf Course over to Old Garth, they will have about 1.5 miles of that 9-mile pipeline put in, which she thinks is wonderful. She stated it will be interesting, going forward, to see what other construction projects end up making it better for them to do this earlier than that timeframe that is on the CIP now.

Mr. Gaffney stated on the North Rivanna Water Treatment Plant Upgrade, he knew there was a question about, given the future regulatory issues, whether or not to continue with that. He asked Mr. Mawyer if he knew when that decision would be made, and if they need to build the Airport Road storage tank before that.

Mr. Mawyer replied that they were meeting with Mr. O'Connell and Ms. Hildebrand that Friday to review an early draft of the study that was done about the North Rivanna Water Treatment Plant and the options to bring it up to standards and regulations. He stated Mr. Gaffney may recall that when they had the flood in 2018, which flooded the lagoons, the VA Department of Environmental Quality told RWSA they needed to build new lagoons in different locations.

Mr. Mawyer stated RWSA has had a consultant evaluating alternatives to renovations and improvements for that facility, as well as exploring the option of decommissioning the facility, and tying directly into the South Rivanna Treatment Plant. He stated that with the Airport Road Pump Station, they would have a more than adequate system to serve all of Route 29 North, and North Rivanna would not be required.

Mr. Mawyer stated that within six months, they would come to the board with some discussion about those alternatives.

Mr. O'Connell asked Ms. McIlwee if she could pull up the previous slide that showed the five-year rates. He stated he wanted to comment on a dilemma regarding the City and County customers. He stated the dilemma about this CIP is not just about the five-year period, but likely the 15-year period. He stated with the level of deferred maintenance and the need for replacement, he believes all the water treatment plants in the CIP are either undergoing major renovations or upgrades, which will improve water quality.

Mr. O'Connell stated this is tremendously expensive. He stated he has concerns about a 14.3% wholesale water increase in this economy, plus nearly double digits for the next five years. He stated he suspects ACSA will use reserves to assist with the retail rate in the coming year and keep the rate increase more like 5%. He stated eventually, they are going to have significant rate increases for long periods of time. He stated adding those up for a County customer results in a 50% increase in five years.

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Mr. O'Connell stated that he, Mr. Mawyer, and Ms. Hildebrand have had discussions about the need to educate their customers for what is coming and why, and how water quality improvement is a major part of that. He stated there are a significant number of wastewater improvements that are mostly smaller projects, but there are a number of them that are somewhat off the radar. He stated there are a lot of dollars that will need to come from customer rates to support this program.

Mr. Gaffney recalled that in 2002, the infrastructure of the Rivanna Authorities was substandard. He stated they have a long time to catch up to where they were. He stated he believes they have caught up, but they still have progress and growth, with Crozet being a good example of that in terms of having to rebuild the dam and water treatment plant. He stated building in the redundancy of all of the systems is not an inexpensive proposition.

Dr. Palmer added that where they were with the sewer system in 2003 and 2004, it is a different world in terms of what the Authority has been able to do in improving that sewer system and cleaning up the rivers. She stated it has been amazing, and she thinks the deferred maintenance is a huge reason why they have the increases that they are looking at over time.

Dr. Palmer stated she does understand Mr. O'Connell's point, and she is very grateful that the Service Authority has done such an excellent job with reserves and financing over the last several years. She stated it is extraordinary what a good job they have done in planning for this with their reserves and rate stabilization.

Mr. Gaffney asked Mr. O'Connell if he suggests that the educational portion of explaining where they are, how they got there, and where they are going be a combination of the City, County, and Service Authority.

Mr. O'Connell replied yes. He stated this is the conversation they have had because the issue is the same for any one of their customers. He stated the exact rate amount might differ. He stated depending on where they live, the project may be in their backyard versus somewhere else, but looking at the system as a whole, the needs are there for the whole system to serve their customers.

Mr. O'Connell stated he does not think the customers are prepared for this kind of increase. He stated the pipeline is not a significant part of the next five years. He stated it trickles in the five-year period after that. He stated this is the project most people talk about, and they do not talk about the other projects. He stated the awareness and publicity needs to be heightened at every chance, and there needs to be a common education program as well.

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Ms. Hildebrand added that they are in the midst of a customer survey update for the City customers. She stated what has been interesting, which goes to the conversations that she, Mr. Mawyer, and Mr. O'Connell have been having, which is that last year, when they did the customer survey, there were little to no comments associated with whether people were getting good value for their money from a water and sewer rate standpoint. She stated this year, in the comments associated with rates, they are receiving a lot of comments that people think their rates are too high.

Ms. Hildebrand stated getting this information out there as to what people are really paying for is important so that people understand they are building in redundancy and resiliency and taking care of their water and sewer for them.

Dr. Palmer stated now that people have done such a good job with conservation and are using a lot less water that was anticipated, the average household is using less water than they did ten years ago. She asked how this compares in the bill. She stated she wondered how much people's bills have actually gone up since they are using less water.

Mr. Gaffney stated this was a great question.

Mr. Mawyer stated that when RWSA did its study ten years ago, it was 110 gallons per person and now, it is down to 60 gallons per person, to Dr. Palmer's point. He stated he does not know how it has affected their bills, but he remembered that the metric has changed.

Dr. Palmer stated she thinks this should be part of the education as well. She stated she had no idea how it affected the average bill, at that point.

Mr. Mawyer stated the rate could be higher, but the total bill may not be.

Ms. Hildebrand stated this was true.

Mr. Gaffney stated it would be good to see how this has changed over the years. He asked Mr. O'Connell and Ms. Hildebrand if they had the old data.

Mr. O'Connell replied that there was actually data in the ten-year update. He stated the average household use is down, but system-wide, it is up because of growth, and the big area of water use is outdoor water use.

Mr. Gaffney stated he thinks it would be great to do it not on water use (or to have this on the side), but to have it truly comparable, dollar-to-dollar, what was paid each of the last ten years in an average bill, taking an average household or particular household to see if somehow, the

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conservation has made up for the raises in rates, or what percentage of it has been made up in the rate.

Mr. O'Connell stated they could do this, but his gut reaction would be that the rate increase exceeds the average household reduction.

Mr. Gaffney agreed, and asked by what percentage.

Mr. O'Connell replied that he did not know.

Mr. Gaffney stated he was just thinking that it helps with the educational portion that they were talking about.

Mr. O'Connell stated one of the dilemmas is that most of the cost is for things that support the overall system. He stated there is a little growth here and there, but the biggest part is the deferred maintenance and making sure they have redundancy and high water quality. He stated they could look at the rates.

Dr. Palmer stated given what has been in the news in the recent few weeks and last several years, there are many things to point to that support that water quality and redundancy in the system. She stated what happened in Texas is not going to happen in Charlottesville/Albemarle, even if they have an incredible cold snap.

Mr. O'Connell stated they are doing everything they can to keep that from happening.

Dr. Palmer stated there can certainly be frozen pipes, but it is not going to be on the scale that has happened in some other communities.

Mr. Mawyer stated where it becomes analogous to them is for the drought of record. He stated the current drought of record is back in 2002, when the drought lasted for 18 months. He stated the question is if the next drought of record is 24 months, would the infrastructure be prepared to deal with a drought longer than the last drought of record.

Dr. Palmer stated she certainly understood where they were coming from, and that Mr. O'Connell was right. She stated she did not know what that education would entail, but she was sure he would tell them.

Mr. O'Connell stated he wanted to make the board aware of it. He stated they have done a detailed review of the CIP, and the biggest number of things are deferred maintenance or replacement that needs to be done. He stated the question is when to do it, or to continue to put it

off. He stated there will be some sticker shock for customers, and they need to prepare the customers for that as much as they can.

Mr. O'Connell stated Ms. Hildebrand's survey comes off of a year where there was no increase in the rate, and people still had concerns about whether or not they are getting a good value. He stated it is ironic that that has come up in the survey.

Ms. Hildebrand stated they found this very interesting, as there was no rate increase last year and with the comments coming out.

Dr. Palmer asked if they were getting more people answering the survey this year.

Ms. Hildebrand that it was currently about the same. She stated they are still in the midst of it, and it is a month-long survey. She stated this was after the first week, and they have been surprised by some of the comments. She stated it is obvious that they must do more education.

Ms. Hildebrand stated some of the comments are even associated with another surprise that she has not talked to Mr. O'Connell and Mr. Mawyer about, which has just come up and is associated with water quality. She stated she does not think that people even understand the extensive filtration system, with the granular activated carbon. She stated they have to get out there again to make sure that people understand this.

Dr. Palmer stated they do not. She stated she did not know about people in the City, but she sees people all of the time having no idea about the GAC system, and they say they do not want to drink the treated water because of all of the publicity in other communities about treated water. She stated this has hurt as well.

Ms. Hildebrand stated they need to get this out there again and keep it in front of people. She stated they cannot assume that just because they talked about it when it went in place, they remember it.

Dr. Palmer agreed.

Mr. Mawyer stated as he has mentioned before, the GAC is a leading technology for the treatment of the PFAS problem, with the per- and polyfluorinated substances that are hot on all the regulators' lists right now as the next thing to regulate. He stated RWSA has the best system that has been identified so far to take those contaminants out of the water. He stated it was an expensive $30 million that is still in the bond rates that they are paying for.

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Mr. Snook asked if he could ask one question that he knew he was going to get flack about, when the issue comes up. He asked if it is possible to get a rough idea of how much of this price increase might be attributable to additional pipeline issues. He stated as Mr. Mawyer mentioned earlier, this was not much, but he wanted to know if there was a way to quantify this.

Mr. Mawyer asked what Mr. Snook meant about the additional pipelines.

Mr. Snook stated he was looking at anticipating the questions that Ms. Dede Smith and others will be asking of why they are doing all these major capital projects when they do not really need them, as Ms. Smith would say. He stated now, there are water rate increases that are very dramatic, and he does not know whether they are connected or coupled at all and if so, by how much. He stated he is trying to anticipate what a response ought to be.

Mr. Mawyer stated this was a good question. He stated the plan is that in March, they will bring the proposed operating budget to the board. He stated they will run some rate scenarios that would say, for example, if the Rivanna to Ragged pipeline was not in the budget or was deferred, how it would affect the rates. He asked Mr. Snook if this was what he was after.

Mr. Snook replied that this would be very helpful. He stated his sense of things, which he supposed they would see of more in March when they get the whole budget, is that generally speaking, the longer-term debt service kinds of issues are not what is driving the rate increases. He stated he would like to know more details about that.

Mr. Mawyer stated the CIP projects drive the rate increases.

Dr. Palmer stated the Central Water Line would be something happening in the next few years, which is a pipe. She stated this is something that she has been hearing about (by a different name) for a number of years. She stated it was identified in the mid-1980s as a necessary part of the system to deal with the pressure in the system. She stated this is a big-ticket item in the City.

Mr. Snook stated he had a question related to the Central Water Line. He asked what the relationship is between this and the West Main Streetscape Project. He asked if there was a thought that the Central Waterline would be basically running down Main Street if they were going to be doing the West Main Street project, which is up in the air now. He stated he wanted to know what the alternatives might look like.

Mr. Mawyer replied that this was an option that the study identified of co-locating water lines with the City project. He stated the Central Waterline project would be one of the projects they would talk about with Ms. Hildebrand and Mr. O’Connell the following day, February 24, in terms of where some corridors might be through the City that would be preferable to others. He

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stated Ms. Hildebrand could interject on the Main Street project and how this will coordinate with RWSA's work.

Mr. Snook stated he would perhaps talk to Ms. Hildebrand later in the week.

Dr. Palmer added that the importance of it to the system is a great thing to talk about with the City residents. She stated it is liable to be disruptive when it goes in.

Ms. Hildebrand mentioned that when the Rivanna rates are presented and have the division between the City and ACSA, this is really the wholesale rate and only tells part of the story. She stated Mr. O'Connell incorporates it into his rates, and the City incorporates it into the City rates. She stated they tend to be dampened a little once the City incorporates them into their rates, and so that only tells part of the story and the final impact on a customer. She stated they have to keep this in mind when they talk about it. She stated the City will not set their rates until June.

Mr. Mawyer stated he thinks they all look for opportunities that when they open a road to put in a pipe, they are able to accomplish as much as they can for everyone. He stated this is part of the discussion on the West Main project, but if it is not at that location, there may be other places that both entities can get a benefit from doing a pipe project.

Dr. Palmer stated Mr. Snook knows that the Ragged Mountain Reservoir to the Observatory Hill Treatment Plant water line and pump station is a big-ticket item, and this is replacing antiquated infrastructure, referring back to deferred maintenance.

Mr. Gaffney stated it will also be because the Observatory Water Treatment Plant will be able to process 10 million gallons per day, and so they need a much bigger pipe.

Mr. Mawyer added that they need a larger and reliable pipe. He stated when they crank up the expanded Observatory WTP, they want to be sure they can get the raw water there.

Mr. Snook stated he was just thinking about it in terms of the debate that Council is having in the next week and month over the West Main Streetscape project, and if it were to turn out that they would save RWSA $3 million, for example, to be opening up Main Street anyway instead of having to run it through some different route, this would be the kind of thing that would be nice to know.

Mr. Mawyer reminded Mr. Snook that they would be talking about that project the following day. He noted that Project #5 (South Rivanna to Ragged Mountain Raw Waterline) is 80% funded by ACSA and 20% by the City.

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Mr. O'Connell stated if he did his math correctly, it is less than $5 million of the five-year CIP ($169 million) that is going towards the pipeline project. He stated it is a small part of the next five-year picture.

Mr. Mawyer agreed, adding that it starts in FY 27.

Mr. O'Connell stated it was somewhat more complicated than that due to the way that some money was set aside toward future bonds. He stated it was not a very significant piece of the $169 million.

Mr. Snook stated it sounded like it was about 3%.

Mr. Mawyer stated this was the plan and that he welcomed the board's comments. He stated he is working closely with Ms. Hildebrand and Mr. O'Connell and is sensitive to the costs that they are talking about. He stated just like with the pretreatment facility, they are looking for any way that they can decide to maintain water quality without having to spend quite as much money to pump water to Ragged, which is what they are evaluating.

Mr. Gaffney asked Mr. Mawyer if, for the new members of the board, he could go over the schedule for the next couple of months as it regards the CIP.

Mr. Mawyer stated in March, they will have both the Solid Waste and the Water and Sewer Operating Budgets introduced to the boards. He stated in May, both boards will have public hearings, with the intent to adopt the budgets and CIPs for FY 22 starting July 1. He stated there will thus be two more budget meetings, in March and May.

Mr. Mawyer stated in April, there will be other topics, and this will be for the Water Authority only. He stated this will possibly be on sustainability and possibly options for the North Rivanna Water Treatment Plant.

Mr. Mawyer stated in June, they will be looking at the reservoirs and emerging regulations.

10. OTHER ITEMS FROM BOARD/STAFF NOT ON AGENDA

There were none.

11. CLOSED MEETING

There was no closed meeting.

12. ADJOURNMENT

At 3:28 p.m., Mr. Richardson moved to adjourn the meeting of the Rivanna Water and Sewer Authority. The motion was seconded by Dr. Palmer and passed unanimously (7-0).

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RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
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MEMORANDUM

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

FROM: **BILL MAWYER, EXECUTIVE DIRECTOR**

SUBJECT: **EXECUTIVE DIRECTOR'S REPORT**

DATE: **MARCH 23, 2021**

STRATEGIC PLAN GOAL: WORKFORCE DEVELOPMENT

COVID Vaccinations

We are coordinating with the Blue Ridge Health Department to schedule appointments for our employees. 75% of our water/sewer staff requested vaccinations, and from that group, 85% have received one or more vaccinations.

STRATEGIC PLAN GOAL: INFRASTRUCTURE AND MASTER PLANNING

Central Water Line

We have had several productive meetings with City and ACSA staff to consider possible routes through the City for this 24" finished water distribution pipe needed to strengthen the urban system.

North Rivanna Water Treatment Plant

We have had several productive meetings with City and ACSA staff to consider cost effective options to provide significant upgrades needed vs. removal of this plant from our urban water system without compromising reliability and customer service.

S. Rivanna to Ragged Mtn Reservoir Water Line

Progress continues in our efforts to acquire 9.5 miles of easements and agreements (with VDOT) for this 36" water line. We anticipate completion of an easement agreement with the County School Board in April. Discussions continue with 3 private owners and UVAF.

STRATEGIC PLAN GOAL: COMMUNICATION AND COLLABORATION & OPERATIONAL OPTIMIZATION

Regional Peer Safety Meeting

Rivanna Authorities hosted a virtual Regional Peer Safety Meeting to network and coordinate efforts with similar organizations. Attendees included safety staff from the Albemarle County Service Authority, City Utilities Department, Augusta County, and Louisa County.

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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: LONNIE WOOD, DIRECTOR OF FINANCE AND ADMINISTRATION

REVIEWED: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: JANUARY MONTHLY FINANCIAL SUMMARY – FY 2021

DATE: MARCH 23, 2021

Urban Water flow and rate revenues are 2.5% over budget estimates through January, and Urban Wastewater flow and rate revenues are 16% over budget. Revenues and expenses are summarized in the table below:

	Urban Water	Urban Wastewater	Total Other Rate Centers	Total Authority
Operations				
Revenues	$ 4,698,432	$ 5,914,088	$ 1,333,243	$ 11,945,763
Expenses	(4,984,964)	(5,074,222)	(1,345,425)	(11,404,611)
Surplus (deficit)	$ (286,532)	$ 839,866	$ (12,182)	$ 541,152
Debt Service				
Revenues	$ 4,016,681	$ 4,988,828	$ 966,121	$ 9,971,630
Expenses	(4,044,483)	(4,983,735)	(973,188)	(10,001,406)
Surplus (deficit)	$ (27,802)	$ 5,093	$ (7,067)	$ (29,776)
Total				
Revenues	$ 8,715,113	$ 10,902,916	$ 2,299,364	$ 21,917,393
Expenses	(9,029,447)	(10,057,957)	(2,318,613)	(21,406,017)
Surplus (deficit)	$ (314,334)	$ 844,959	$ (19,249)	$ 511,376

When reviewing the Authority as a whole, operating revenues are $1,014,000 over budget and operating expenses are $513,000 over budget.

A. Annual Transactions

Some revenues and expenses are over the prorated year-to-date budget due to one-time annual payments made or revenues received for the year. These transactions appear to be significant impacts on the budget vs. actual monthly comparisons but will even out as the year progresses. Septage receiving support revenue of $109,441 is received annually from

the County. Annual payments made for certain leases and maintenance agreements and some quarterly insurance premiums are some good examples.

B. Personnel Costs (various departments) – Unbudgeted Special Award bonuses were paid to staff in October, and unbudgeted merit pool salary increases went into effect in January. Maintenance department salaries were underbudgeted this year in error.

C. Professional Services (Urban Water, Crozet Water – pages 2-3) – Urban Water has incurred $110,000 of unbudgeted professional fees, but those fees have been billed to UVA pursuant to our Supplemental Water Treatment Systems Study, Design and Construction Agreement. The reimbursement has been recorded as Miscellaneous revenue. Crozet is slightly over the annual budget for this category.

D. Other Services and Charges (Urban Water and Wastewater – pages 2 and 5) – Urban Water incurred $57,000 of unbudgeted watershed management costs due to unexpected charges related to mitigation plan compliance. Urban Water and Urban Wastewater utilities are running higher than anticipated. Urban Wastewater is $7800 over the annual budget for lab analysis costs and over the prorated budget for safety programs, odor control and sludge hauling costs

E. Operations and Maintenance (Urban Water, Glenmore Wastewater – pages 2 and 6) – Urban Water is $361,000 over its total annual budget for Pipeline and Appurtenances repairs due to several major line breaks, and Glenmore had some unexpected equipment repair costs.

F. Communications (Urban Water, Crozet Water – pages 2-3) – Urban Water and Crozet Water data lines were upgraded to fiber, and the annual costs will be much higher going forward.

Attachments

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021
Fiscal Year 2021

Consolidated
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 17,381,293	$ 10,139,088	$ 10,996,337	$ 857,249	8.45%
Lease Revenue		105,000	61,250	68,472	7,222	11.79%
Admin., Maint. & Engineering Revenue		545,000	317,917	375,504	57,587	18.11%
Other Revenues		542,788	316,626	648,836	332,210	104.92%
Use of Reserves-GAC		535,220	312,212	85,600	(226,612)	-72.58%
Rate Stabilization Reserves		240,027	140,016	140,016	-	0.00%
Interest Allocation		35,100	20,475	6,501	(13,974)	-68.25%
Total Operating Revenues		**$ 19,384,428**	**$ 11,307,583**	**$ 12,321,266**	**$ 1,013,683**	**8.96%**
Expenses						
Personnel Cost	**B**	$ 8,913,257	$ 5,158,625	$ 5,249,284	$ (90,658)	-1.76%
Professional Services	**A, C**	602,700	351,575	478,131	(126,556)	-36.00%
Other Services & Charges	**D**	3,136,780	1,829,788	1,989,897	(160,108)	-8.75%
Communications	**F**	161,020	93,928	129,985	(36,057)	-38.39%
Information Technology	**A**	392,950	229,221	176,067	53,154	23.19%
Supplies		47,045	27,443	22,671	4,772	17.39%
Operations & Maintenance	**A, E**	4,918,416	2,869,076	3,073,995	(204,919)	-7.14%
Equipment Purchases		352,250	205,479	158,418	47,061	22.90%
Depreciation		860,000	501,667	501,667	(0)	0.00%
Reserve Transfers		-	-	-	-	
Total Operating Expenses		**$ 19,384,418**	**$ 11,266,803**	**$ 11,780,114**	**$ (513,311)**	**-4.56%**
Operating Surplus/(Deficit)		**$ 10**	**$ 40,780**	**$ 541,152**		

Debt Service Budget vs. Actual

Revenues					
Debt Service Rate Revenue	$ 15,861,016	$ 9,252,259	$ 9,252,264	$ 5	0.00%
Use of Reserves	954,652	556,880	556,880	-	
Septage Receiving Support - County	109,440	63,840	109,441	45,601	71.43%
Buck Mountain Lease Revenue	1,600	933	-	(933)	-100.00%
Trust Fund Interest	135,900	79,275	4,829	(74,446)	-93.91%
Reserve Fund Interest	666,000	388,500	48,216	(340,284)	-87.59%
Total Debt Service Revenues	**$ 17,728,608**	**$ 10,341,688**	**$ 9,971,630**	**$ (370,058)**	**-3.58%**
Debt Service Costs					
Total Principal & Interest	$ 14,380,219	$ 8,388,461	$ 8,388,461	$ -	0.00%
Reserve Additions-Interest	666,000	388,500	48,216	340,284	87.59%
Debt Service Ratio Charge	725,000	422,917	422,917	-	0.00%
Reserve Additions-CIP Growth	1,957,394	1,141,813	1,141,813	-	0.00%
Total Debt Service Costs	**$ 17,728,613**	**$ 10,341,691**	**$ 10,001,406**	**$ 340,284**	**3.29%**
Debt Service Surplus/(Deficit)	**$ (5)**	**$ (3)**	**$ (29,776)**		

Summary

Total Revenues	$ 37,113,036	$ 21,649,271	$ 22,292,896	$ 643,625	2.97%
Total Expenses	37,113,031	21,608,493	21,781,520	(173,027)	-0.80%
Surplus/(Deficit)	**$ 5**	**$ 40,778**	**$ 511,376**		

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021

Urban Water Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 7,118,541	$ 4,152,482	$ 4,255,743	$ 103,261	2.49%
Lease Revenue		75,000	43,750	50,685	6,935	15.85%
Miscellaneous	C	-	-	248,718	248,718	
Use of Reserves-GAC		500,000	291,667	85,600	(206,067)	-70.65%
Rate Stabilization Reserves		94,254	54,982	54,982	-	0.00%
Interest Allocation		14,600	8,517	2,704	(5,812)	-68.25%
Total Operating Revenues		**$ 7,802,395**	**$ 4,551,397**	**$ 4,698,432**	**$ 147,034**	**3.23%**
Expenses						
Personnel Cost	B	$ 1,918,361	$ 1,110,972	$ 1,146,418	$ (35,446)	-3.19%
Professional Services	C	134,000	78,167	282,873	(204,707)	-261.88%
Other Services & Charges	D	738,130	430,576	517,192	(86,616)	-20.12%
Communications	F	76,000	44,333	61,615	(17,282)	-38.98%
Information Technology		85,500	49,875	30,357	19,518	39.13%
Supplies		5,745	3,351	4,509	(1,157)	-34.53%
Operations & Maintenance	A, E	2,159,300	1,259,592	1,453,600	(194,008)	-15.40%
Equipment Purchases		28,000	16,333	12,763	3,571	21.86%
Depreciation		300,000	175,000	175,000	-	0.00%
Reserve Transfers		-	-	-	-	
Subtotal Before Allocations		$ 5,445,036	$ 3,168,199	$ 3,684,326	$ (516,128)	-16.29%
Allocation of Support Departments		2,357,359	1,365,150	1,300,637	64,513	4.73%
Total Operating Expenses		**$ 7,802,395**	**$ 4,533,348**	**$ 4,984,963**	**$ (451,615)**	**-9.96%**
Operating Surplus/(Deficit)		**$ 0**	**$ 18,049**	**$ (286,532)**		

Debt Service Budget vs. Actual

	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues					
Debt Service Rate Revenue	$ 6,178,645	$ 3,604,210	$ 3,604,181	$ (29)	0.00%
Trust Fund Interest	49,000	28,583	1,743	(26,840)	-93.90%
Reserve Fund Interest	339,600	198,100	24,590	(173,510)	-87.59%
Use of Reserves	662,000	386,167	386,167	-	0.00%
Lease Revenue	1,600	933	-	(933)	-100.00%
Total Debt Service Revenues	**$ 7,230,845**	**$ 4,217,993**	**$ 4,016,681**	**$ (201,312)**	**-4.77%**
Debt Service Costs					
Total Principal & Interest	$ 5,215,445	$ 3,042,343	$ 3,042,343	$ -	0.00%
Reserve Additions-Interest	339,600	198,100	24,590	173,510	87.59%
Debt Service Ratio Charge	400,000	233,333	233,333	-	0.00%
Reserve Additions-CIP Growth	1,275,800	744,217	744,217	-	0.00%
Total Debt Service Costs	**$ 7,230,845**	**$ 4,217,993**	**$ 4,044,483**	**$ 173,510**	**4.11%**
Debt Service Surplus/(Deficit)	**$ -**	**$ -**	**$ (27,802)**		

Rate Center Summary

Total Revenues	$ 15,033,240	$ 8,769,390	$ 8,715,112	$ (54,278)	-0.62%
Total Expenses	15,033,240	8,751,341	9,029,446	(278,105)	-3.18%
Surplus/(Deficit)	**$ 0**	**$ 18,049**	**$ (314,334)**		
Costs per 1000 Gallons	$ 2.30		$ 2.45		
Operating and DS	$ 4.42		$ 4.44		
Thousand Gallons Treated	3,397,700	1,981,992	2,031,380	49,388	2.49%
or					
Flow (MGD)	9.309		9.448		

Rivanna Water & Sewer Authority
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Crozet Water Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 1,028,808	$ 600,138	$ 600,138	$ -	0.00%
Lease Revenues		30,000	17,500	17,788	288	1.64%
Use of Reserves-GAC		26,000	15,167	-	(15,167)	-100.00%
Interest Allocation		2,100	1,225	384	(841)	-68.69%
Total Operating Revenues		**$ 1,086,908**	**$ 634,030**	**$ 618,309**	**$ (15,720)**	**-2.48%**
Expenses						
Personnel Cost	**B**	$ 302,598	$ 175,237	$ 182,677	$ (7,440)	-4.25%
Professional Services	**C**	15,000	8,750	15,983	(7,233)	-82.66%
Other Services & Charges		142,360	83,043	54,577	28,467	34.28%
Communications	**F**	5,600	3,267	10,820	(7,553)	-231.21%
Information Technology		2,250	1,313	449	864	65.79%
Supplies		1,350	788	1,131	(343)	-43.58%
Operations & Maintenance	**A**	353,292	206,087	258,181	(52,094)	-25.28%
Equipment Purchases		3,000	1,750	1,750	-	0.00%
Depreciation		40,000	23,333	23,333	0	0.00%
Reserve Transfers		-	-	-	-	
Subtotal Before Allocations		$ 865,450	$ 503,567	$ 548,900	$ (45,333)	-9.00%
Allocation of Support Departments		221,456	128,252	123,016	5,236	4.08%
Total Operating Expenses		**$ 1,086,906**	**$ 631,819**	**$ 671,916**	**$ (40,097)**	**-6.35%**
Operating Surplus/(Deficit)		**$ 2**	**$ 2,210**	**$ (53,607)**		

Debt Service Budget vs. Actual

Revenues					
Debt Service Rate Revenue	$ 1,311,312	$ 764,932	$ 764,932	$ -	0.00%
Trust Fund Interest	11,600	6,767	410	(6,356)	-93.93%
Use of Reserves	198,252	115,647	115,647	-	0.00%
Reserve Fund Interest	15,700	9,158	1,157	(8,001)	-87.36%
Total Debt Service Revenues	**$ 1,536,864**	**$ 896,504**	**$ 882,147**	**$ (14,357)**	**-1.60%**
Debt Service Costs					
Total Principal & Interest	$ 1,217,569	$ 710,249	$ 710,249	$ -	0.00%
Reserve Additions-Interest	15,700	9,158	1,157	8,001	87.36%
Reserve Additions-CIP Growth	303,600	177,100	177,100	-	0.00%
Total Debt Service Costs	**$ 1,536,869**	**$ 896,507**	**$ 888,506**	**$ 8,001**	**0.89%**
Debt Service Surplus/(Deficit)	**$ (5)**	**$ (3)**	**$ (6,359)**		

Rate Center Summary

Total Revenues	$ 2,623,772	$ 1,530,534	$ 1,500,456	$ (30,078)	-1.97%
Total Expenses	2,623,775	1,528,326	1,560,422	(32,096)	-2.10%
Surplus/(Deficit)	**$ (3)**	**$ 2,207**	**$ (59,966)**		
Costs per 1000 Gallons	$ 5.47		$ 4.94		
Operating and DS	$ 13.20		$ 11.47		
Thousand Gallons Treated	198,830	115,984	136,061	20,077	17.31%
Flow (MGD)	0.545		0.633		

Rivanna Water & Sewer Authority
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Scottsville Water Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 520,812	$ 303,807	$ 303,807	$ -	0.00%
Use of Reserves-GAC		9,220	5,378	-	$ (5,378)	-100.00%
Interest Allocation		1,000	583	189	(395)	-67.68%
Total Operating Revenues		**$ 531,032**	**$ 309,769**	**$ 303,996**	**$ (5,773)**	**-1.86%**
Expenses						
Personnel Cost		$ 184,031	$ 106,566	$ 111,441	$ (4,875)	-4.58%
Professional Services		71,000	41,417	2,026	39,391	95.11%
Other Services & Charges		22,780	13,288	15,884	(2,596)	-19.53%
Communications		4,600	2,683	5,625	(2,941)	-109.61%
Information Technology		650	379	1,944	(1,565)	-412.64%
Supplies		200	117	42	74	63.61%
Operations & Maintenance		87,662	51,136	43,336	7,800	15.25%
Equipment Purchases		2,500	1,458	1,458	(0)	0.00%
Depreciation		20,000	11,667	11,667	(0)	0.00%
Reserve Transfers		-	-	-	-	
Subtotal Before Allocations		$ 393,423	$ 228,711	$ 193,423	$ 35,288	15.43%
Allocation of Support Departments		137,604	79,706	78,036	1,671	2.10%
Total Operating Expenses		**$ 531,027**	**$ 308,417**	**$ 271,459**	**$ 36,959**	**11.98%**
Operating Surplus/(Deficit)		**$ 5**	**$ 1,351**	**$ 32,537**		

Debt Service Budget vs. Actual

Revenues						
Debt Service Rate Revenue		$ 128,749	$ 75,104	$ 75,103	$ (1)	0.00%
Trust Fund Interest		1,200	700	43	(657)	-93.79%
Reserve Fund Interest		8,300	4,842	579	(4,263)	-88.05%
Total Debt Service Revenues		**$ 138,249**	**$ 80,645**	**$ 75,725**	**$ (4,920)**	**-6.10%**
Debt Service Costs						
Total Principal & Interest		$ 126,032	$ 73,519	$ 73,519	$ -	0.00%
Reserve Additions-Interest		8,300	4,842	579	4,263	
Reserve Additions-CIP Growth		3,917	2,285	2,285	-	
Total Debt Service Costs		**$ 138,249**	**$ 80,645**	**$ 76,382**	**$ 4,263**	**5.29%**
Debt Service Surplus/(Deficit)		**$ -**	**$ -**	**$ (657)**		

Rate Center Summary

Total Revenues	$ 669,281	$ 390,414	$ 379,721	$ (10,693)	-2.74%
Total Expenses	669,276	389,063	347,841	41,222	10.60%
Surplus/(Deficit)	**$ 5**	**$ 1,351**	**$ 31,880**		
Costs per 1000 Gallons	$ 30.79		$ 21.14		
Operating and DS	$ 38.81		$ 27.08		
Thousand Gallons Treated	17,245	10,060	12,844	2,784	27.68%
or					
Flow (MGD)	0.047		0.060		

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021

Urban Wastewater Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 8,033,620	$ 4,686,278	$ 5,440,266	$ 753,988	16.09%
Stone Robinson WWTP		22,788	13,293	8,568	(4,725)	-35.55%
Septage Acceptance		475,000	277,083	302,328	25,245	9.11%
Nutrient Credits		45,000	26,250	86,999	60,749	231.42%
Rate Stabilization Reserve		121,233	70,719	70,719	-	0.00%
Miscellaneous Revenue		-	-	2,224	2,224	
Interest Allocation		16,100	9,392	2,984	(6,408)	-68.23%
Total Operating Revenues		**$ 8,713,741**	**$ 5,083,016**	**$ 5,914,088**	**$ 831,073**	**16.35%**
Expenses						
Personnel Cost		$ 1,299,876	$ 752,436	$ 730,013	$ 22,423	2.98%
Professional Services	A	143,400	83,650	96,406	(12,756)	-15.25%
Other Services & Charges	D	2,020,300	1,178,508	1,288,602	(110,094)	-9.34%
Communications		10,700	6,242	8,402	(2,160)	-34.60%
Information Technology		69,500	40,542	11,289	29,253	72.16%
Supplies		1,900	1,108	1,254	(146)	-13.15%
Operations & Maintenance	A	1,767,000	1,030,750	1,045,912	(15,162)	-1.47%
Equipment Purchases		125,250	73,063	44,738	28,324	38.77%
Depreciation		470,000	274,167	274,167	(0)	0.00%
Reserve Transfers		-	-	-	-	
Subtotal Before Allocations		$ 5,907,926	$ 3,440,465	$ 3,500,783	$ (60,317)	-1.75%
Allocation of Support Departments		2,805,815	1,625,059	1,573,439	51,620	3.18%
Total Operating Expenses		**$ 8,713,741**	**$ 5,065,525**	**$ 5,074,222**	**$ (8,697)**	**-0.17%**
Operating Surplus/(Deficit)		**$ (0)**	**$ 17,491**	**$ 839,867**		

Debt Service Budget vs. Actual

	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues					
Debt Service Rate Revenue	$ 8,229,090	$ 4,800,303	$ 4,800,334	$ 32	0.00%
Septage Receiving Support - County	109,440	63,840	109,441	45,601	71.43%
Trust Fund Interest	74,000	43,167	2,627	(40,540)	-93.91%
Use of Reserves	94,400	55,067	55,067	-	0.00%
Reserve Fund Interest	295,200	172,200	21,359	(150,841)	-87.60%
Total Debt Service Revenues	**$ 8,802,130**	**$ 5,134,576**	**$ 4,988,828**	**$ (145,748)**	**-2.84%**
Debt Service Costs					
Total Principal & Interest	$ 7,812,130	$ 4,557,076	$ 4,557,076	$ -	0.00%
Reserve Additions-Interest	295,200	172,200	21,359	150,841	87.60%
Debt Service Ratio Charge	325,000	189,583	189,583	-	0.00%
Reserve Additions-CIP Growth	369,800	215,717	215,717	-	0.00%
Total Debt Service Costs	**$ 8,802,130**	**$ 5,134,576**	**$ 4,983,735**	**$ 150,841**	**2.94%**
Debt Service Surplus/(Deficit)	**$ -**	**$ -**	**$ 5,093**		

Rate Center Summary

Total Revenues	$ 17,515,871	$ 10,217,591	$ 10,902,916	$ 685,325	6.71%
Total Expenses	17,515,871	10,200,100	10,057,957	142,144	1.39%
Surplus/(Deficit)	**$ (0)**	**$ 17,491**	**$ 844,960**		
Costs per 1000 Gallons	$ 2.57		$ 2.21		
Operating and DS	$ 5.17		$ 4.38		
Thousand Gallons Treated	3,390,400	1,977,733	2,296,439	318,706	16.11%
or					
Flow (MGD)	9.289		10.681		

Rivanna Water & Sewer Authority
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Glenmore Wastewater Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 370,524	$ 216,139	$ 216,139	$ -	0.00%
Rate Stabilization Reserve		24,540	14,315	14,315	-	0.00%
Interest Allocation		700	408	130	(278)	-68.16%
Total Operating Revenues		**$ 395,764**	**$ 230,862**	**$ 230,584**	**$ (278)**	**-0.12%**
Expenses						
Personnel Cost		$ 97,804	$ 56,624	$ 53,025	$ 3,599	6.36%
Professional Services		24,200	14,117	87	14,029	
Other Services & Charges		36,800	21,467	21,811	(344)	-1.60%
Communications		3,200	1,867	2,208	(341)	-18.28%
Information Technology		4,050	2,363	915	1,448	61.28%
Supplies		-	-	654	(654)	
Operations & Maintenance	E	109,100	63,642	85,001	(21,360)	-33.56%
Equipment Purchases		3,700	2,158	2,158	0	0.00%
Depreciation		10,000	5,833	5,833	0	0.00%
Subtotal Before Allocations		$ 288,854	$ 168,070	$ 171,693	$ (3,623)	-2.16%
Allocation of Support Departments		106,907	61,939	61,523	416	0.67%
Total Operating Expenses		**$ 395,761**	**$ 230,008**	**$ 233,216**	**$ (3,207)**	**-1.39%**
Operating Surplus/(Deficit)		**$ 3**	**$ 854**	**$ (2,632)**		

Debt Service Budget vs. Actual

Revenues					
Debt Service Rate Revenue	$ 3,778	$ 2,204	$ 2,205	$ 1	0.05%
Trust Fund Interest	-	-	-	-	
Reserve Fund Interest	3,000	1,750	241	(1,509)	-86.22%
Total Debt Service Revenues	**$ 6,778**	**$ 3,954**	**$ 2,446**	**$ 1**	**0.03%**
Debt Service Costs					
Total Principal & Interest	$ 1,579	$ 921	$ 921	$ -	0.00%
Reserve Additions-CIP Growth	2,199	1,283	1,283	-	0.00%
Reserve Additions-Interest	3,000	1,750	241	1,509	86.22%
Total Debt Service Costs	**$ 6,778**	**$ 3,954**	**$ 2,445**	**$ 1,509**	**38.16%**
Debt Service Surplus/(Deficit)	**$ -**	**$ -**	**$ 1**		

Rate Center Summary

Total Revenues	$ 402,542	$ 234,816	$ 233,030	$ (1,786)	-0.76%
Total Expenses	402,539	233,962	235,661	(1,698)	-0.73%
Surplus/(Deficit)	**$ 3**	**$ 854**	**$ (2,630)**		
Costs per 1000 Gallons	$ 9.51		$ 8.71		
Operating and DS	$ 9.67		$ 8.80		
Thousand Gallons Treated	41,629	24,284	26,774	2,490	**10.26%**
or					
Flow (MGD)	0.114		0.125		

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021

Scottsville Wastewater Rate Center
Revenues and Expenses Summary

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Operations Rate Revenue		$ 308,988	$ 180,243	$ 180,243	$ -	0.00%
Interest Allocation		600	350	111	(240)	-68.43%
Total Operating Revenues		**$ 309,588**	**$ 180,593**	**$ 180,354**	**$ (240)**	**-0.13%**
Expenses						
Personnel Cost		$ 97,317	$ 56,340	$ 53,025	$ 3,315	5.88%
Professional Services		2,100	1,225	87	1,138	92.87%
Other Services & Charges		23,710	13,831	18,659	(4,828)	-34.91%
Communications		3,720	2,170	2,033	137	6.29%
Information Technology		1,500	875	478	397	45.39%
Supplies		500	292	0	291	99.88%
Operations & Maintenance		57,812	33,724	23,926	9,798	29.05%
Equipment Purchases		3,700	2,158	2,158	0	0.00%
Depreciation		20,000	11,667	11,667	(0)	0.00%
Subtotal Before Allocations		$ 210,359	$ 122,281	$ 112,034	$ 10,247	8.38%
Allocation of Support Departments		99,228	57,487	56,801	686	1.19%
Total Operating Expenses		**$ 309,587**	**$ 179,768**	**$ 168,834**	**$ 10,933**	**6.08%**
Operating Surplus/(Deficit)		**$ 1**	**$ 825**	**$ 11,519**		

Debt Service Budget vs. Actual

Revenues					
Debt Service Rate Revenue	$ 9,442	$ 5,508	$ 5,509	$ 1	0.02%
Trust Fund Interest	100	58	5	(54)	-91.77%
Reserve Fund Interest	4,200	2,450	289	(2,161)	-88.19%
Total Debt Service Revenues	**$ 13,742**	**$ 8,016**	**$ 5,803**	**$ (2,213)**	**-27.61%**
Debt Service Costs					
Total Principal & Interest	$ 7,464	$ 4,354	$ 4,354	$ -	0.00%
Reserve Additions-Interest	4,200	2,450	289	2,161	88.19%
Estimated New Principal & Interest	2,078	1,212	1,212	-	0.00%
Total Debt Service Costs	**$ 13,742**	**$ 8,016**	**$ 5,855**	**$ 2,161**	**26.95%**
Debt Service Surplus/(Deficit)	**$ -**	**$ -**	**$ (52)**		

Rate Center Summary

Total Revenues	$ 323,330	$ 188,609	$ 186,157	$ (2,453)	-1.30%
Total Expenses	323,329	187,784	174,690	13,094	6.97%
Surplus/(Deficit)	**$ 1**	**$ 825**	**$ 11,467**		
Costs per 1000 Gallons	$ 13.39		$ 9.56		
Operating and DS	$ 13.98		$ 9.89		
Thousand Gallons Treated	23,126	13,490	17,663	4,173	**30.93%**
or					
Flow (MGD)	0.063		0.082		

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021

Administration

Operating Budget vs. Actual

	Notes	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues						
Payment for Services SWA		$ 543,000	$ 316,750	$ 316,750	$ -	0.00%
Miscellaneous Revenue		2,000	1,167	46,143	44,976	3855.11%
Total Operating Revenues		**$ 545,000**	**$ 317,917**	**$ 362,893**	**$ 44,976**	**14.15%**
Expenses						
Personnel Cost	**B**	$ 1,906,136	$ 1,102,602	$ 1,110,061	$ (7,458)	-0.68%
Professional Services		183,000	106,750	71,395	35,355	33.12%
Other Services & Charges		80,600	47,017	49,665	(2,648)	-5.63%
Communications		21,500	12,542	12,591	(50)	-0.40%
Information Technology		177,000	103,250	102,927	323	0.31%
Supplies		24,250	14,146	11,271	2,875	20.32%
Operations & Maintenance	**A**	75,200	43,867	50,369	(6,503)	-14.82%
Equipment Purchases		24,000	14,000	8,167	5,833	41.67%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 2,491,686**	**$ 1,444,173**	**$ 1,416,446**	**$ 27,727**	**1.92%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (1,946,686)**	**$ (1,126,256)**	**$ (1,053,553)**	**$ (72,704)**	**6.46%**
Allocations to the Rate Centers						
Urban Water	44.00%	**$ 856,542**	**$ 495,553**	**$ 463,563**	**$ 31,990**	
Crozet Water	4.00%	**$ 77,867**	**45,050**	**42,142**	**2,908**	
Scottsville Water	2.00%	**$ 38,934**	**22,525**	**21,071**	**1,454**	
Urban Wastewater	48.00%	**$ 934,409**	**540,603**	**505,705**	**34,898**	
Glenmore Wastewater	1.00%	**$ 19,467**	**11,263**	**10,536**	**727**	
Scottsville Wastewater	1.00%	**$ 19,467**	**11,263**	**10,536**	**727**	
	100.00%	**$ 1,946,686**	**$ 1,126,256**	**$ 1,053,553**	**$ 72,704**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021

Maintenance

Operating Budget vs. Actual

	Notes	*Budget FY 2021*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
Payment for Services SWA		$ -	$ -	$ -	$ -	
Miscellaneous Revenue		-	-	3,101	3,101	
Total Operating Revenues		**$ -**	**$ -**	**$ 3,101**	**$ 3,101**	
Expenses						
Personnel Cost	**B**	$ 1,233,605	$ 714,042	$ 785,797	$ (71,755)	-10.05%
Professional Services		-	-	-	-	
Other Services & Charges		50,700	29,575	15,724	13,851	46.83%
Communications		17,400	10,150	15,050	(4,900)	-48.28%
Information Technology		8,500	4,958	5,894	(935)	-18.87%
Supplies		2,000	1,167	170	997	85.45%
Operations & Maintenance		84,550	49,321	53,165	(3,844)	-7.79%
Equipment Purchases		139,000	81,083	71,750	9,333	11.51%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 1,535,755**	**$ 890,296**	**$ 947,549**	**$ (57,253)**	**-6.43%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (1,535,755)**	**$ (890,296)**	**$ (944,448)**	**$ 60,355**	**-6.78%**
Allocations to the Rate Centers						
Urban Water	30.00%	**$ 460,727**	**$ 267,089**	**$ 283,334**	**$ (16,246)**	
Crozet Water	3.50%	**53,751**	**31,160**	**33,056**	**(1,895)**	
Scottsville Water	3.50%	**53,751**	**31,160**	**33,056**	**(1,895)**	
Urban Wastewater	56.50%	**867,702**	**503,017**	**533,613**	**(30,596)**	
Glenmore Wastewater	3.50%	**53,751**	**31,160**	**33,056**	**(1,895)**	
Scottsville Wastewater	3.00%	**46,073**	**26,709**	**28,333**	**(1,625)**	
	100.00%	**$ 1,535,755**	**$ 890,296**	**$ 944,448**	**$ (54,152)**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021

Laboratory

Operating Budget vs. Actual

	Notes	*Budget FY 2021*	*Budget Year-to-Date*	*Actual Year-to-Date*	*Budget vs. Actual*	*Variance Percentage*
Revenues						
N/A						
Expenses						
Personnel Cost		$ 404,171	$ 233,827	$ 230,470	$ 3,357	1.44%
Professional Services		-	-	-	-	
Other Services & Charges		7,600	4,433	875	3,558	80.26%
Communications		2,100	1,225	871	354	
Information Technology		2,500	1,458	102	1,357	93.04%
Supplies		1,300	758	837	(78)	-10.34%
Operations & Maintenance		97,250	56,729	36,656	20,073	35.38%
Equipment Purchases		1,600	933	933	0	0.00%
Depreciation		-	-	-	-	
Total Operating Expenses		**$ 516,521**	**$ 299,365**	**$ 270,743**	**$ 28,622**	**9.56%**

Department Summary

Net Costs Allocable to Rate Centers		**$ (516,521)**	**$ (299,365)**	**$ (270,743)**	**$ (28,622)**	**9.56%**
Allocations to the Rate Centers						
Urban Water	44.00%	**$ 227,269**	**$ 131,721**	**$ 119,127**	**$ 12,594**	
Crozet Water	4.00%	**20,661**	**11,975**	**10,830**	**1,145**	
Scottsville Water	2.00%	**10,330**	**5,987**	**5,415**	**572**	
Urban Wastewater	47.00%	**242,765**	**140,701**	**127,249**	**13,452**	
Glenmore Wastewater	1.50%	**7,748**	**4,490**	**4,061**	**429**	
Scottsville Wastewater	1.50%	**7,748**	**4,490**	**4,061**	**429**	
	100.00%	**$ 516,521**	**$ 299,365**	**$ 270,743**	**$ 28,622**	

Rivanna Water & Sewer Authority
Monthly Financial Statements - January 2021

Engineering

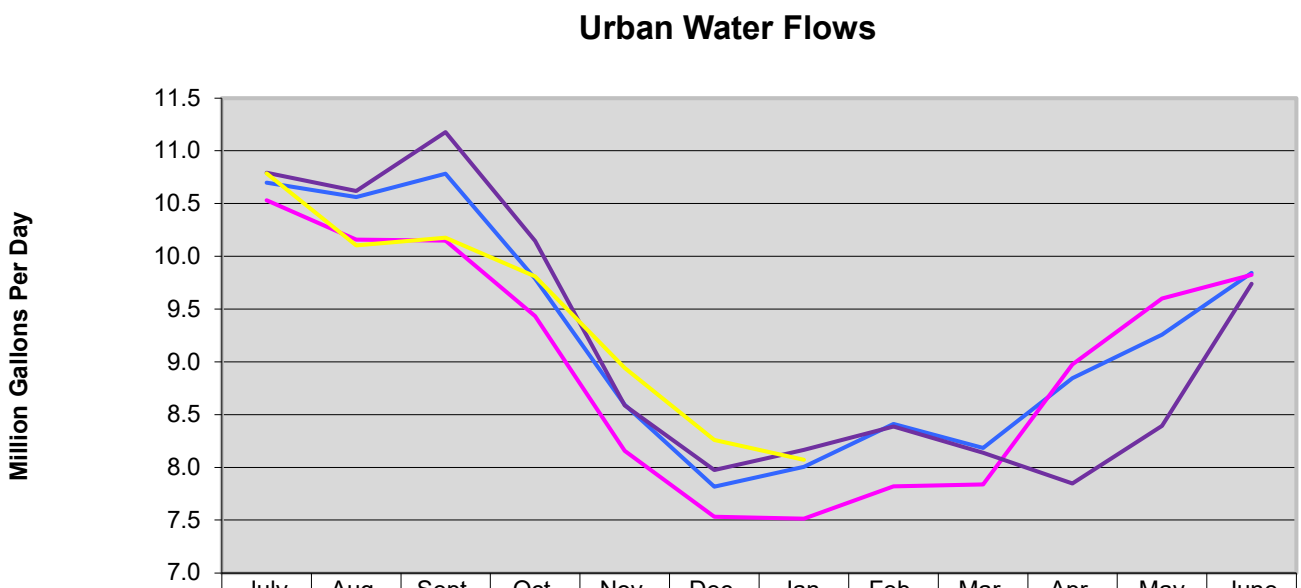
Operating Budget vs. Actual

	Budget FY 2021	Budget Year-to-Date	Actual Year-to-Date	Budget vs. Actual	Variance Percentage
Revenues					
Payment for Services SWA	$ -	$ -	$ 9,510	$ 9,510	
Total Operating Revenues	**$ -**	**$ -**	**$ 9,510**	**$ 9,510**	
Expenses					
Personnel Cost	$ 1,469,358	$ 849,980	$ 846,357	$ 3,622	0.43%
Professional Services	30,000	17,500	9,273	8,227	47.01%
Other Services & Charges	13,800	8,050	6,909	1,141	14.18%
Communications	16,200	9,450	10,770	(1,320)	-13.97%
Information Technology	41,500	24,208	21,714	2,495	10.31%
Supplies	9,800	5,717	2,803	2,913	50.96%
Operations & Maintenance	127,250	74,229	23,849	50,380	67.87%
Equipment Purchases	21,500	12,542	12,542	(0)	0.00%
Depreciation & Capital Reserve Transfers	-	-	-	-	
Total Operating Expenses	**$ 1,729,408**	**$ 1,001,676**	**$ 934,217**	**$ 67,459**	**6.73%**

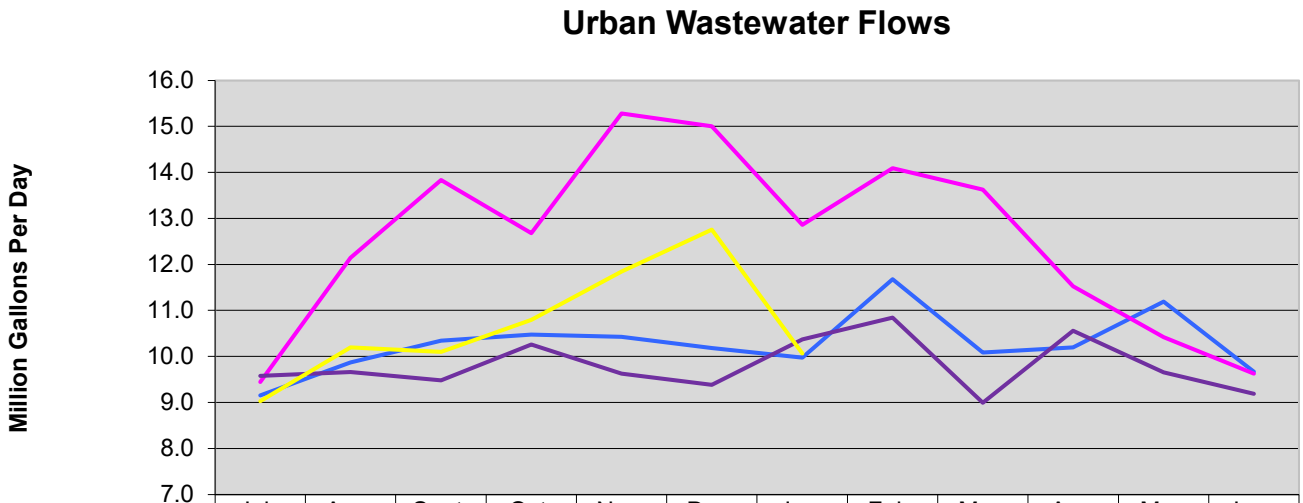
Department Summary

Net Costs Allocable to Rate Centers		**$ (1,729,408)**	**$ (1,001,676)**	**$ (924,707)**	**$ (57,949)**	**5.79%**
Allocations to the Rate Centers						
Urban Water	47.00%	**$ 812,822**	**$ 470,788**	**$ 434,612**	**$ 36,175**	
Crozet Water	4.00%	**69,176**	**40,067**	**36,988**	**3,079**	
Scottsville Water	2.00%	**34,588**	**20,034**	**18,494**	**1,539**	
Urban Wastewater	44.00%	**760,939**	**440,737**	**406,871**	**33,866**	
Glenmore Wastewater	1.50%	**25,941**	**15,025**	**13,871**	**1,155**	
Scottsville Wastewater	1.50%	**25,941**	**15,025**	**13,871**	**1,155**	
	100.00%	**$ 1,729,408**	**$ 1,001,676**	**$ 924,707**	**$ 76,968**	

Rivanna Water and Sewer Authority
Flow Graphs



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG.	10.70	10.56	10.78	9.79	8.59	7.82	8.00	8.41	8.18	8.84	9.26	9.84
FY 2019	10.53	10.16	10.15	9.43	8.16	7.53	7.51	7.82	7.84	8.98	9.60	9.82
FY 2020	10.79	10.62	11.18	10.14	8.59	7.98	8.16	8.39	8.14	7.85	8.39	9.74
FY 2021	10.78	10.10	10.17	9.81	8.94	8.26	8.07					



	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
5 YR AVG	9.15	9.87	10.35	10.47	10.43	10.18	9.97	11.68	10.08	10.20	11.19	9.67
FY 2019	9.45	12.14	13.83	12.68	15.28	15.00	12.86	14.09	13.62	11.52	10.42	9.62
FY 2020	9.58	9.66	9.48	10.26	9.63	9.38	10.37	10.84	8.99	10.56	9.66	9.19
FY 2021	9.03	10.20	10.10	10.79	11.85	12.75	10.06					

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
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www.rivanna.org

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 FEBRUARY 2021

DATE: MARCH 23, 2021

WATER OPERATIONS:

The average daily/monthly total water distributed for February 2021 was as follows:

Water Treatment Plant	*Average Daily Production (MGD)*	*Total Monthly Production (MG)*	*Maximum Daily Production in the Month (MGD)*
Observatory	1.64	46.02	2.11 (02/22/21)
South Rivanna	6.36	178.02	7.15 (02/05/21)
North Rivanna	0.35	9.69	0.46 (02/07/21)
Urban Total	8.35	233.73	9.21 (02/05/21)
Crozet	0.58	16.36	0.73 (02/08/21)
Scottsville	0.046	1.30	0.08 (02/17/21)
Red Hill	0.0017	0.048	0.009 (02/10/21)
RWSA Total	8.98	251.44	---

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

Status of Reservoirs (as of March 17, 2021):

- Urban Reservoirs: 97.65 % of Total Useable Capacity
- Ragged Mountain Reservoir is full (100%)
- Sugar Hollow Reservoir is not full (81.54%)*
- South Rivanna Reservoir is full (100%)
- Beaver Creek Reservoir is full (100%)
- Totier Creek Reservoir is full (100%)

*The Sugar Hollow Reservoir has been lowered 5 ft. for replacement of the rubber bladder on the dam.

WASTEWATER OPERATIONS:

All RWSA Water Resource Recovery Facilities (WRRFs) were in regulatory compliance with their effluent limitations during February 2021. Stone-Robinson School was placed back in service in the middle of the month. Performance of the WRRFs in February was as follows compared to the respective VDEQ permit limits:

WRRF	*Average Daily Effluent Flow (mgd)*	*Average $CBOD_5$ (ppm)*		*Average Total Suspended Solids (ppm)*		*Average Ammonia (ppm)*	
		RESULT	*LIMIT*	*RESULT*	*LIMIT*	*RESULT*	*LIMIT*
Moores Creek	11.95	3.0	10	1.1	22	0.44	7.0
Glenmore	0.127	4.0	15	3.0	30	NR	NL
Scottsville	0.114	7.0	25	8.0	30	NR	NL
Stone Robinson	0.015	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 February 2021.

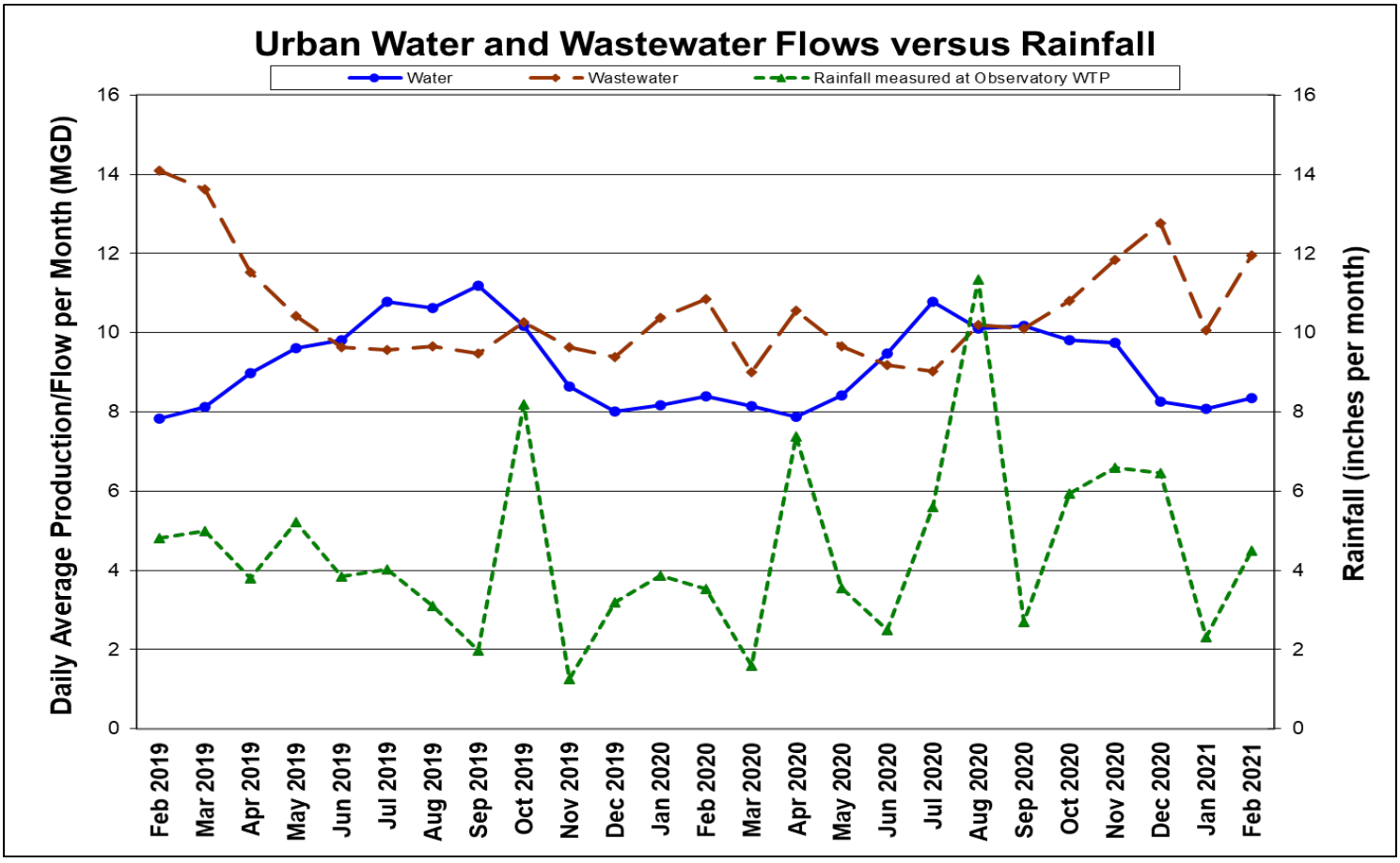
State Annual Allocation (lb./yr.) Permit		*Average Monthly Allocation (lb./mo.) **	*Moores Creek Discharge February (lb./mo.)*	*Performance as % of monthly average Allocation**	*Year to Date Performance as % of annual allocation*
Nitrogen	282,994	23,583	7,758	33%	5%
Phosphorous	18,525	1,544	243	16%	2%

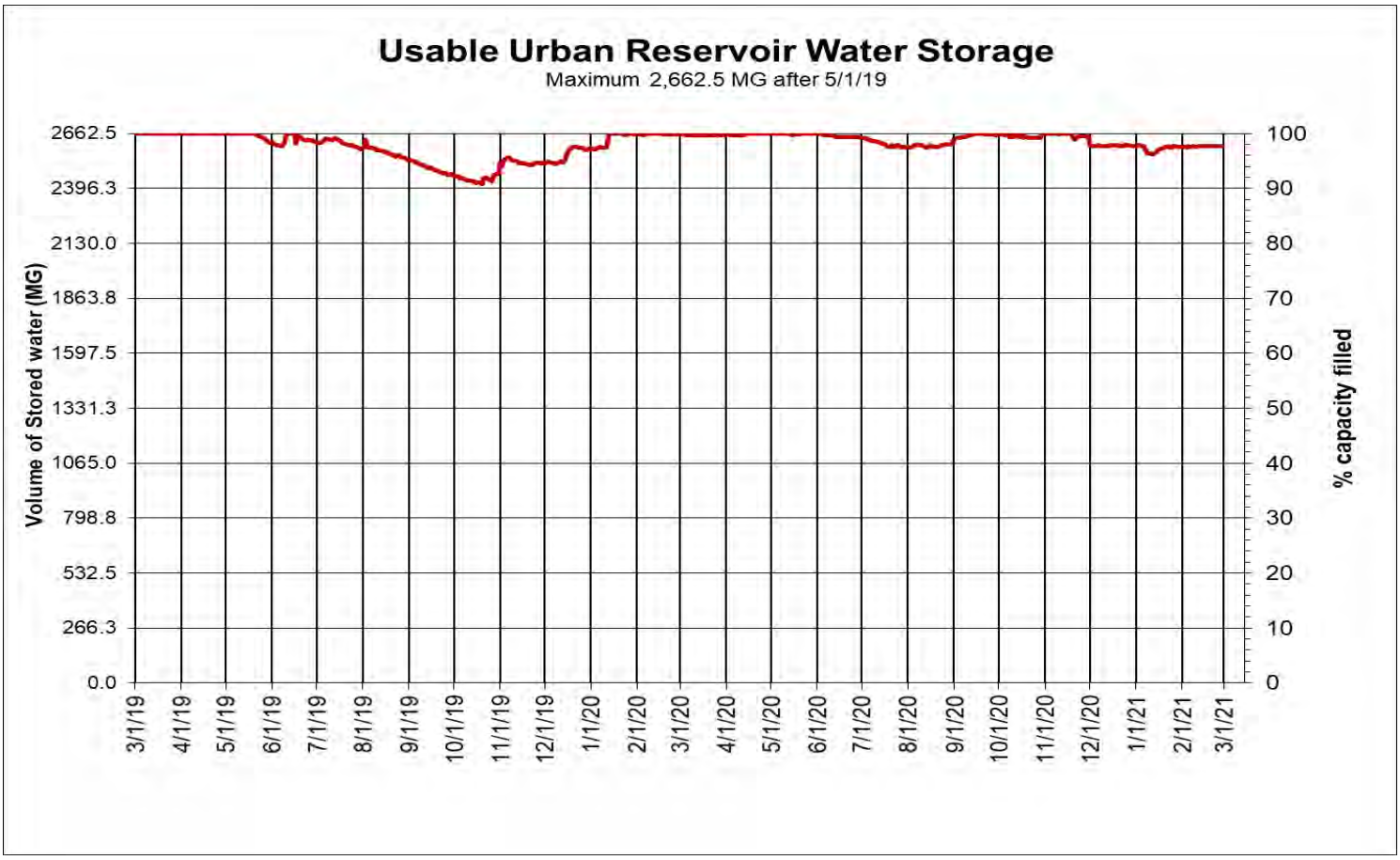
*State allocations are expressed as annual amounts. One-twelfth of that allocation is an internal monthly benchmark for comparative purposes only.

WATER AND WASTEWATER DATA:

The following graphs are provided for review:

- Usable Urban Reservoir Water Storage
- Urban Water and Wastewater Flows versus Rainfall
- Yearly water production by system


Urban Water and Wastewater Flows versus Rainfall
Water
Wastewater
Rainfall measured at Observatory WTP
Daily Average Production/Flow per Month (MGD)
Rainfall (inches per month)
0
2
4
6
8
10
12
14
16
Feb 2019
Mar 2019
Apr 2019
May 2019
Jun 2019
Jul 2019
Aug 2019
Sep 2019
Oct 2019
Nov 2019
Dec 2019
Jan 2020
Feb 2020
Mar 2020
Apr 2020
May 2020
Jun 2020
Jul 2020
Aug 2020
Sep 2020
Oct 2020
Nov 2020
Dec 2020
Jan 2021
Feb 2021


Usable Urban Reservoir Water Storage
Maximum 2,662.5 MG after 5/1/19
Volume of Stored water (MG)
% capacity filled
2662.5
2396.3
2130.0
1863.8
1597.5
1331.3
1065.0
798.8
532.5
266.3
0.0
100
90
80
70
60
50
40
30
20
10
0
3/1/19
4/1/19
5/1/19
6/1/19
7/1/19
8/1/19
9/1/19
10/1/19
11/1/19
12/1/19
1/1/20
2/1/20
3/1/20
4/1/20
5/1/20
6/1/20
7/1/20
8/1/20
9/1/20
10/1/20
11/1/20
12/1/20
1/1/21
2/1/21
3/1/21

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
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www.rivanna.org

MEMORANDUM

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

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

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

SUBJECT: **STATUS REPORT: ONGOING PROJECTS**

DATE: **MARCH 23, 2021**

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/2020/06/2021-2025-CIP-Final.pdf

Under Construction

1. Crozet Water Treatment Plant Expansion
2. South Rivanna and Observatory Water Treatment Plant Renovations
3. Crozet Flow Equalization Tank
4. MC Aluminum Slide Gate Replacements
5. South Rivanna Dam – Gate Repairs
6. Sugar Hollow Dam – Gate Replacement and Intake Tower Repairs
7. MC Exterior Lighting Improvements

Design and Bidding

8. Ragged Mtn Reservoir to Observatory WTP Raw Water Line and Pump Station
9. Beaver Creek Dam, Pump Station and Piping Improvements
10. Airport Road Water Pump Station and Piping
11. South Fork Rivanna River Crossing
12. MC Clarifier and Silo Demolition
13. MC Generator Fuel Expansion
14. MC Facility Renovations
15. MC 5kV Electrical System Upgrades
16. Glenmore WRRF Influent Pump & VFD Addition

Planning and Studies

17. South Rivanna Reservoir to Ragged Mtn Reservoir Water Line Right-of-Way
18. Urban Finished Water Infrastructure Master Plan
19. Upper Schenks Branch Interceptor, Phase II
20. Asset Management Plan
21. Albemarle-Berkeley PS Capacity Analysis
22. MC Facilities Master Plan
23. SRR to RMR Pipeline – Pretreatment Pilot Study
24. Central Water Line - Routing Study

Other Significant Projects

25. Urgent and Emergency Repairs
26. Interceptor Sewer & Manhole Repair
27. Security Enhancements

Under Construction

1. Crozet Water Treatment Plant Expansion

Design Engineer:	Short Elliot Hendrickson (SEH)
Construction Contractor:	Orders Construction Co. (WVA)
Construction Start:	December 2018
Percent Complete:	98%
Base Construction Contract + Change Orders to Date = Current Value:	$7,170,000 - $47,372.73 = $7,122,627.27
Completion:	March 2021
Budget:	$8,500,000

Current Status: Work is being completed on the chemical feed lines associated with the liquid lime system. A proposal request was sent to the contractor for the addition of new intermediate pumps and a new raw water pump. As that request is formalized, the project completion date will be updated to account for this additional work.

2. 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:	20%
Base Construction Contract + Change Orders to Date = Current Value:	$36,748,500 + $222,723.32 = $36,971,223,32
Completion:	March 2023
Budget:	$43,000,000

Current Status: Work continues at the SRWTP with construction of the filter building expansion and excavation work for the foundations of the Alum and Fluoride Chemical Storage Building and Administration Building. Installation of baffle walls in the flocculation basins is complete and replacement of the mixer in the aeration basin has begun. The contractor has mobilized to the OBWTP and installed E&S measures in preparation for excavation work associated with the new Chemical Building.

3. Crozet Flow Equalization Tank

Design Engineer:	Schnabel Engineering
Construction Contractor:	Anderson Construction (Lynchburg, VA)
Construction Start:	September 2020
Percent Complete:	15%
Based Construction Contract + Change Orders to Date = Current Value:	$4,406,300
Completion:	November 2022
Budget:	$5,400,000

Current Status: Installation of the relocated sewer interceptor is nearly complete with bypass pumping to commence once the contractor is ready to make the final connections.

4. MC Aluminum Slide Gate Replacements

Design Engineer:	Hazen and Sawyer
Construction Contractor:	Waco Incorporated (Sandston, VA)
Construction Start:	September 2020
Percent Complete:	25%
Base Construction Contract + Change Orders to Date = Current Value:	$373,600 - $30,400 = $343,200
Completion:	October 2021
Budget:	$675,000

Current Status: Waco has completed slide gate replacement at the UV facility and has begun work at the headworks to install new conduit and actuators on the slide gates for the grit facility.

5. South Rivanna Dam – Gate Repairs

Design Engineer:	N/A
Contractor:	Bander Smith, Inc. (Richmond, VA)
Construction Start:	December 2020
Project Status:	90%
Completion:	April 2021
Budget:	$500,000

Current Status: Replacement of missing stem guides and actuators to improve the seal of the existing gates was completed in February 2021. At that time, replacement of the bottom seals on both gates was identified as necessary to achieve the desired reduction in leakage without requiring wholesale replacement of the gates. Materials have been ordered, and seal replacement work is expected to take place by the end of April, 2021.

6. Sugar Hollow Dam – Gate Replacement and Intake Tower Repairs

Design Engineer:	Schnabel Engineering
Construction Contractor:	Allegheny Construction (Roanoke, VA)
Construction Start:	October 2020
Percent Complete:	50%
Base Construction Contract + Change Order to Date = Current Value:	$1,410,875
Completion:	December 2021
Budget:	$1,900,000

Current Status: Installation of the new bladder is expected to begin this month. Periodic lowering of the reservoir by 2-5 feet will be required by the contractor for remaining construction activities.

7. MC Exterior Lighting Improvements

Design Engineer:	Hazen and Sawyer
Construction Contractor:	Pyramid Electrical Contractors (Richmond, VA)
Construction Start:	April 2021
Percent Complete:	0%
Base Construction Contract + Change Order to Date = Current Value:	$349,000
Completion:	February 2022
Budget:	$900,000

Current Status: Contracts are being finalized and a preconstruction meeting and Notice to Proceed are anticipated this month. Our Maintenance department has completed installation of their portion of the replacement wall packs and all full cutoff visors that have been delivered to date.

Design and Bidding

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

Design Engineer:	Michael Baker International (Baker)
Project Start:	August 2018
Project Status:	Prelim Design & Easement Acquisition
Construction Start:	2023

Completion:	2027
Budget:	$24,000,000

Current Status:

Easement negotiations with two private owners, UVA, the UVA Foundation, and the Virginia Department of Forestry are in progress.

9. 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:	15% Design and Permitting Underway
Construction Start:	2024
Completion:	2026
Budget:	$27,000,000

Current Status: An updated site selection study for the new Raw Water Pump Station, Intake and Piping has been updated and is under review. Hazen continues with environmental investigations required for development of a Joint Permit Application to be submitted to the VDEQ in 2021. A two-year planning study kicked off in late August 2020. The study is being completed with 100% funding from the Natural Resources Conservation Service (NRCS), part of the US Department of Agriculture (USDA). Following completion of the study and approval by NRCS in 2022, staff will pursue additional federal funding for up to 65% of the cost of design and construction.

10. Airport Road Water Pump Station and Piping

Design Engineer:	Short Elliot Hendrickson (SEH)
Project Start:	July 2019
Project Status:	70% Design
Construction Start:	September 2021
Completion:	June 2023
Budget:	$7,600,000

Current Status: SEH is working on County Site Plan, ARB, and WPO submittals and anticipates County submission of all documents in March.

11. South Fork Rivanna River Crossing

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2020
Project Status:	10% Design
Construction Start:	Spring 2022
Completion:	Fall 2023
Budget:	$3,655,000

Current Status: VDOT has provided preliminary feedback on the new water line alignments which may be in right-of-way on residue parcels from the original western bypass project. Additional discussions are on-going to determine the timing for conveying those parcels back to the previous owners. Baker is working on preliminary profiles of the potential water line alignments for the river crossing.

12. MC Clarifier and Lime Silo Demolition

Design Engineer:	Hazen and Sawyer
Project Start:	October 2020
Project Status:	50% Design
Construction Start:	Summer 2021
Completion:	Summer 2022
Budget:	$655,000

Current Status: Design is underway with a draft submittal of the plans and specifications expected this month for review.

13. MC Generator Fuel Storage Expansion

Design Engineer:	SEH, Inc.
Project Start:	August 2020
Project Status:	95% Design
Construction Start:	Spring 2021
Completion:	Summer 2021
Budget:	$100,000

Current Status: Final quote documents are being completed and advertisement of the RFQ is expected this month.

14. MC Facility Renovations

Design Engineer:	SEH, Inc.
Project Start:	August 2020
Project Status:	0% Design
Construction Start:	Winter 2020/2021
Completion:	Summer 2021
Budget:	$750,000

Current Status: Staff is evaluating the Duty Station for conversion into office space. This conversion will require extensive cleaning and the relocation of load bearing walls. An updated cost estimate has been developed by SEH to confirm the viability of this conversion. This work is on hold pending the outcome of the Moores Creek Facility Master Plan.

15. MC 5 kV Electrical System Upgrades

Design Engineer:	Hazen and Sawyer
Project Start:	August 2020
Project Status:	25% Design
Construction Start:	March 2022
Completion:	June 2024
Budget:	$4,600,000

Current Status: Hazen is completing a 50% Design Submittal to RWSA, which is anticipated in mid-April. Maintenance of plant operations discussions will begin later this month.

16. Glenmore WRRF Influent Pump and VFD Addition

Design Consultant:	Wiley|Wilson
Project Start:	August 2020
Project Status:	20% Design
Construction Start:	2021
Completion:	Fall 2021
Budget:	$65,000

Current Status: Design is under way and a site visit was recently conducted by the Consultant to confirm site conditions.

Planning and Studies

17. 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:	2021
Budget:	$2,295,000

Current Status: Progress continues in our efforts to acquire the 9.5 miles of easements and agreements (with VDOT) for this 36" water line. Discussions continue on remaining easements with 3 private owners, UVA Foundation, and the Albemarle County School Board.

18. Urban Finished Water Infrastructure Master Plan

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2018
Project Status:	90% complete
Completion:	April 2021
Budget:	$253,000

Current Status: The revised draft Master Plan is anticipated by mid-March and will be circulated to

stakeholders for review and comment.

19. Upper Schenks Branch Interceptor, Phase II

Design Engineer:	Frazier Engineering, P.A.
Project Start:	TBD
Project Status:	Alignment Analysis
Construction Start:	TBD
Completion:	TBD
Budget:	$3,985,000

Current Status: Discussions about the pipe alignment will be renewed with the County and the City. Following pipe alignment determinations, the design plans will be updated, and the construction approach will be coordinated with a City project planned for the same general area.

20. Asset Management Plan

Design Engineer:	GHD, Inc.
Project Start:	July 2018
Project Status:	Phase 2 – 90% Complete CMMS Implementation – 7% Complete
Completion:	2021
Budget:	$1,115,000

Current Status: Development of the final pilot study components is being completed. For implementation of the new CMMS, a number of workshops have been held with the Maintenance, Operations, and Engineering Departments to identify their current workflows for eventual incorporation into the new CMMS. GHD is also beginning the process of developing an RWSA-wide asset register based on an export of assets from the current work order system that is being replaced.

21. Albemarle-Berkley PS Capacity Analysis

Design Consultant:	GHD, Inc.
Project Start:	September 2019
Project Status:	100% Complete
Completion:	February 2021
Budget:	$40,000

Current Status: RWSA staff has sent the finalized Capacity Analysis Report to ACSA and ACPS. In addition, RWSA has is reviewing a short technical memorandum provided by GHD, which will provide updated cost information on the future PS upgrades once finalized.

22. MC Facilities Master Plan

Design Consultant:	Hazen and Sawyer
Project Start:	August 2019
Project Status:	80% Complete
Completion:	April 2021
Budget:	$275,000

Current Status: Multiple workshops have been held with staff. Hazen is evaluating another future site layout option in more detail and will then submit the draft report.

23. SRR to RMR Pipeline – Pretreatment Pilot Study

Design Consultant:	SEH
Project Start:	August 2020
Project Status:	75% Complete (Phase 1)
Completion:	July 2022
Budget:	$22,969 (Phase 1)

Current Status: Phase 1, analysis of existing water quality and seasonal weather data, is underway. SEH has analyzed all data provided by RWSA and has begun summarizing its findings into a technical memorandum. As Phase 1 gets closer to completion, RWSA and SEH are planning for subsequent phases of the study. A follow-up discussion between RWSA, SEH, and DiNatale Water Consultants was conducted to discuss options to model water quality impacts at Ragged Mountain Reservoir given different transfer water quality conditions from South Fork Rivanna Reservoir. These discussions will continue as the study transitions into Phase 2.

24. Central Water Line Project - Routing Study

Design Consultant:	Michael Baker International (Baker)
Project Start:	February 2021
Project Status:	5% Complete
Completion:	June 2021
Budget:	$63,070

Current Status: Baker, the City, ACSA and our staff are working on a desktop and field analysis of several water line corridors to connect the Observatory WTP to the Pantops area.

Other Significant Projects

25. 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
2018-06	South Rivanna Dam Apron and River Bank Repairs	$200,000
2019-07	Urban Water Line Valve and Blow-off Repair	$175,000
2020-14	MCWWPS Gate Valve 205 Replacement	TBD
2020-09	RVI-MH-64 Erosion	$10,000
2020-18	NRW Erosion Near Airport Road	$5,000
2020-19	RMRW Erosion Near RMRW-015	$10,000
2020-20	Finished Water Sampling Stations	$150,000
2020-21	PCI Erosion	$125,000
2020-23	MCI Erosion @ Moores Creek Crossing (Near Avon Ct)	$50,000
2020-24	CZI Erosion Between MH-55 and MH-56	TBD
2020-25	Upper MRI Point Repair/New MH Installation	$175,000
2021-01	Erosion Between WBI MH-27 & 28	TBD
2021-02	CZI-MH-96 Slope Failure	$30,000
2021-03	UWL Leak @ SRWTP Finished Flow Meter	TBD
2021-04	UWL-ARV-15 Settlement	$25,000

- South Rivanna Dam Apron and River Bank Repairs: Repairs to the north and south concrete aprons are being designed by Schnabel Engineering and a manufacturer's representative was recently on site to review repair procedures. As this approach is finalized, repair services will be procured from the on-call dam maintenance contractor.
- Urban Water Line Valve and Blow-off Repair: Faulconer Construction has completed the installation of a new drain valve at UWL-017, as well as the associated modifications to the drain line outlet and creek bank. With the installation of the new drain valve in March 2020, leakage in this location has ceased. Staff continues to coordinate the logistics of the UWL-025 replacement near Gasoline Alley with the County and Property Owner, including the appropriate location of the discharge. CCTV inspections of adjacent stormwater infrastructure have been completed , and staff is planning to complete the project with Faulconer Construction after the Upper MRI Point Repair/New MH Installation. Relocation of a nearby ARV in a difficult to access location will be included in the scope of work at Gasoline Alley as well. Staff has also been notified of a similar (slight leakage) issue at UWL-010 near Route 29. This assembly currently is blind flanged and is not actively leaking into any adjacent creeks or stormwater structures. Staff will continue planning with this repair with Faulconer Construction.
- Moores Creek WWPS Gate Valve 205 Replacement: In July 2020, RWSA Operations staff identified a valve had become stuck in nearly the fully closed position, causing a reduction in the discharge capacity of the pumping station (PS), especially during wet weather events where both of the 24" force mains leaving the PS are required. Waco, Inc. was selected to perform the work under an Emergency Declaration by the Executive Director, and staff worked with Waco to plan for the associated force main shutdown and valve replacement. Due to excessive lead times and impending weather, a spool piece of pipe was procured for temporary installation while the replacement valve is procured. The existing gate valve was ultimately replaced with the spool

piece of pipe during a planned pumping station shutdown during the early morning hours of August 2, 2020, restoring full pumping capabilities to the PS. In the preliminary attempts to shut down one of the two discharge force mains and replace the No. 205 valve, it was discovered that additional valves inside the PS are not fully holding when placed in a closed position. Staff is currently evaluating the needs associated with bypass pumping around MCWWPS, which would allow for the permanent installation of the No. 205 Gate Valve Replacement, as well as replacement of the adjacent valves mentioned above and inspections of equipment inside of the PS that normally can't be inspected due to the incoming flows.

- RVI-MH-64 Erosion: During routine line maintenance activities, the RWSA Maintenance Department identified an area of minor erosion adjacent to RVI-MH-64. The manhole is located adjacent to a small creek in the Still Meadow/Westmoreland Subdivision. Staff has visited the site with Faulconer Construction, who will complete the repairs as availability and weather allows.
- NRW Erosion Near Airport Road: During routine line maintenance activities, the Maintenance Department identified an area of minor erosion along the North Rivanna Waterline (NRW) near Airport Road. Staff has visited the site with Faulconer Construction, and repairs are anticipated for the week of March 15th.
- RMRW Erosion Near RMRW-015: While marking for a Miss Utility Locate, the Engineering Department identified an area of minor erosion along the Ragged Mountain Raw Waterline (RMRW) near RMRW-015, which is located along Stribling Avenue. RMRW crosses a small stream, which appears to have caused minor erosion along a pipe joint. Staff has visited the site with Faulconer Construction, who is expected to complete the repairs by installing rip-rap along the bank on either side of the crossing.
- Finished Water Sampling Stations: As a part of its ongoing Water Quality Monitoring Program, members of the Water & Laboratory Departments collect water samples from throughout the distribution system to track parameters such as Chlorine Residuals and Disinfection Byproducts. Historically, this has meant that staff must enter local businesses to collect the samples, which takes several minutes and further exposes staff to members of the public. In order to minimize staff exposure to the public and overall impact to local businesses/offices, seven (7) pre-fabricated sampling stations will be installed along ACSA finished water lines throughout the distribution system, which will allow staff to quickly and safely retrieve water samples. Faulconer Construction is performing this work for RWSA, with ACSA providing the associated wet taps. These 7 sites were completed by the week of December 7th. In addition, RWSA staff is coordinating with ACSA, the City, and UVA on a new set of five (5) additional sites. This work is slated to be completed by Faulconer Construction following the Upper MRI Point Repair and New MH Installation, as well as the UWL Blowoff Repairs at Gasoline Alley.
- PCI Erosion: RWSA Maintenance Department staff finished its annual inspection of the Powell Creek Interceptor in early October, and a number of erosion concerns were identified throughout the interceptor alignment. Engineering and Maintenance Department staff determined that two of the repairs were more urgent, and should be performed by Faulconer Construction as soon as possible. Both of the areas in question are large drainage ditches that have caused large wash-outs

over the sewer line. RWSA coordinated access through Sutherland Middle School property with ACPS, and Faulconer began these repairs during the week of October 26. The scope of these two repairs was to backfill the ditches and install a large HDPE culvert pipe to safely and effectively move the storm water across the sewer line while minimizing erosion. The two ditch lines were completed by Faulconer Construction during the week of November 2, with the site fully restored by the week of November 9. Four creek crossings along the interceptor were also identified as needing light rip-rap armament, as well as minor bank modifications to allow for enhanced access for RWSA staff. This work will also be coordinated with Faulconer Construction. A site visit was conducted on November 24, 2020, with the work being scheduled as crews have availability and site conditions allow.

- MCI Erosion @ Moores Creek Crossing (Near Avon Ct): While performing routine line maintenance activities, the RWSA Maintenance Department identified erosion along the Moores Creek Interceptor (MCI), at its creek crossing between MH-39 and MH-40. This is just downstream of the previous bank repair made in this area using imbricated stone in early 2019, which remains standing in good condition. No infrastructure is exposed at this time, and staff will continue to monitor the area and plan for the associated bank repairs (as site conditions allow), which will likely include the placement of large rip-rap to protect the sewer line from future high flow/erosion events.
- CZI Erosion Between MH-55 and MH-56: While performing routine line maintenance activities, RWSA Maintenance staff identified an area of erosion between Crozet Interceptor MH-55 and MH-56, located adjacent to the Buckingham Branch Railroad. A culvert under the railroad seems to be directing stormwater directly across the RWSA easement, causing the washout. No RWSA infrastructure is exposed at this time. Staff has reached out to the railroad to inform them of the issue, as well as begin discussions on the overall responsibility for the repair.
- Upper MRI Point Repair/New MH Installation: RWSA is in the final stages of rehabilitation efforts along the upper Morey Creek Interceptor. The final piece of rehabilitation is to complete a point repair, which includes the installation of approximately 65' of new Ductile Iron Pipe, as well as a new manhole, due to a sag in the existing, Vitrified Clay Pipe. Rather than perform this work under the Sanitary Sewer Rehabilitation Contract, since that contractor generally performs no-dig style rehabilitation, RWSA has elected to shift this project to the On-Call Maintenance Construction Services Contract. RWSA and Faulconer Construction performed a constructability review on site on February 5th, which identified a conflict with a nearby Dominion Energy power pole. Staff is coordinating with Dominion Energy, and is continuing to coordinate with Faulconer Construction. The work is currently scheduled to begin during the week of March 22nd, pending Dominion procuring a temporary easement for necessary support infrastructure of an adjacent power pole. If the work must be postponed, staff will coordinate with Faulconer and transition to other high priority repairs until the work may be started.
- Erosion Between WBI MH-27 & 28: During routine line maintenance activities, the RWSA Maintenance Department identified an area of minor erosion along the Woodbrook Interceptor (WBI), caused by a drainage ditch. No infrastructure is exposed at this time, and staff will have

the repairs scheduled either with the RWSA Maintenance Department or On-Call Contractor as soon as availability allows.

- CZI-MH-96 Slope Failure: Following recent heavy rains, the RWSA Engineering Department performed a 1-year inspection of the previous bank repair at CZI-MH-96. While the vast majority of the repair was found to be in good condition, a short stretch of the imbricated stone wall was undercut from behind, which caused a short stretch of the wall to become dislodged and fall over. Staff will coordinate the repairs with its On-Call Contractor, which will include repairs to the wall and additional erosion control measures behind the wall.
- UWL Leak @ SRWTP Finished Flow Meter: During calibration of the finished flow meter at SRWTP on January 26th, a leak was identified on an existing flange adapter. Staff immediately began coordinating and put together a shutdown plan, and on January 28th, the SRWTP was temporarily shut down to allow English Construction to repair the leak by replacing the existing flange adapter with a new, restrained flange adapter. Within 5-hours, the Urban Waterline was isolated and drained, the necessary repairs were made, and the waterlines at WTP were placed back into service.
- UWL-ARV-15 Settlement: While marking a Miss Utility Ticket, the RWSA Engineering Department identified an ARV that was settling with a small section of Kenwood Lane. No immediate danger to the ARV is present, however, staff has looked at the issue with its On-Call Maintenance Contractor and is coordinating the necessary repairs for completion following some adjacent City sanitary sewer replacement.

26. Interceptor Sewer and Manhole Repair

Design Engineer:	Frazier Engineering
Construction Contractor:	IPR Northeast
Construction Start:	November 2017
Percent Complete:	40%
Base Construction Contract + Change Orders to Date = Current Value:	$1,000,838.79
Expected Completion:	June 2021
Total Capital Project Budget:	$1,088,330 (Urban) + $880,000 (Crozet) = $1,968,330

Current Status: Repairs to the Upper Morey Creek Interceptor remain underway. Staff continues to coordinate with all groups involved to get the repairs completed as soon as possible on this portion of MRI, with mobilization scheduled for the week of March 22nd, pending procurement of a temporary Dominion Easement for support infrastructure. Staff also continues coordination on the lower Powell Creek Interceptor and a portion of the Woodbrook Interceptor, as these are the next high-priority areas to be addressed based upon the latest CCTV footage. The scope of this rehabilitation work is likely to include several sections of Cured in Place Piping, as well as manhole rehabilitation. IPR Northeast mobilized to the area during the week of February 22nd, however, poor site conditions due to heavy rainfall forced demobilization. Staff is coordinating with the Contractor to schedule remobilization as soon as possible, so defects can be prioritized, and repairs scheduled.

27. Security Enhancements

Design Engineer:	N/A
Construction Contractor:	Security 101
Construction Start:	March 2020
Percent Complete:	99% (WA #1)
Based Construction Contract + Change Orders to Date = Current Value:	$744,136.80 - $25,708.80 = $718,428.00 (WA#1)
Completion:	March 2021 (WA #1)
Approved Capital Budget:	$2,730,000

Current Status: Access control system installation is underway for all exterior doors at MCAWRRF, as well as all WTP motorized gates. Device installation at all sites has been completed. The Card Access System is in use at the Administration and Engineering Buildings at MCAWRRF, as well as at the WTP gates. Programming has been completed by Security 101, and the only task that remains is some door/lock improvements at MCAWRRF, which will help enhance the functionality of the access control system and allow it to be placed fully online. Security 101 is finalizing pricing and preparing for these modifications and is also preparing for the next round of installations, which be conducted at the Scottsville and Crozet WTP exterior doors. In addition, staff has been coordinating with Security 101 on getting the necessary conduits installed at South Rivanna and Observatory WTPs. Security 101 is finalizing pricing, and staff is coordinating the work (panel locations, scheduling, etc.) with the ongoing Expansion Project.

History

Under Construction

1. Crozet Water Treatment Plant Expansion

This project was created to increase the supply capacity of the existing Crozet WTP by modernizing plant systems. The goal was to not drastically increase the plant footprint in regard to the existing filter plant, flocculation tanks, and sedimentation basins. By modernizing the outdated equipment within these treatment systems, the plant treatment capacity will be improved by approximately 100% (from 1 to 2 MGD). A Notice to Proceed was issued on December 13, 2018 and the contractor mobilized on February 26, 2019.

2. 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 being 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.

Observatory: This project will upgrade the plant from 7.7 to 10 MGD capacity. Costs to upgrade the plant to 12 MGD were determined to be too high at this time. Much of the Observatory Water

Treatment Plant is original to the 1953 construction. A Condition Assessment Report was completed by SEH in October of 2013. The approved Capital Improvement Plan project was based on the findings from this report. The flocculator systems were replaced and upgraded as part of the Drinking Water Activated Carbon and WTP Improvements project (GAC). Four additional GAC contactors will be included in the design.

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

3. **Crozet Flow Equalization Tank**

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

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

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

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

4. **MC Aluminum Slide Gate Replacements**

Several large aluminum slide gates are located at the influent side of the Moores Creek Pump Station. These gates allow staff to stop or divert flow to perform maintenance activities. After repeated attempts to repair the deteriorated gates, it is now necessary to replace the gates and modify the gate arrangement. There are also several deteriorated gates at the Ultraviolent disinfection facility that leak water, causing a reduced capacity of the facility. Replacement of these gates will restore the process to full capacity. Work also includes replacement of the cast iron gates in the holding pond

pump station and new actuators on the headworks gates. A Notice to Proceed for these efforts was provided on October 6, 2020. The work specific to the Moores Creek Pump Station will be bid under a separate project due to the extensive bypass pumping.

5. **South Rivanna Dam – Gate Repairs**

The South Rivanna Dam, originally constructed in 1965, is equipped with two 36" diameter slide gates and conduits, one each on the north and south abutments of the dam, which can be utilized to dewater the facility or to meet minimum instream flow (MIF) requirements when the dam is not spilling. These gates are original to the dam and while they are operable and are exercised regularly, they are deteriorated and can no longer provide a complete seal, therefore allowing some leakage through the dam. RWSA has protocols in place to temporarily stop leakage through the gates when necessary to conserve water; however, there is a desire to repair or replace the gates and components as needed to restore full functionality. The project includes other repairs to the facility, including improvements to the concrete wall adjacent to the Raw Water Pump Station as well as improvements to the north dam tower to provide safer access by staff while still discouraging access by the general public.

6. **Sugar Hollow Dam – Rubber Crest Gate Replacement and Intake Tower Repairs**

In 1998, the Sugar Hollow Dam underwent a significant upgrade to improve structural stability and spillway capacity. The original metal spillway gates were replaced with a manufactured five-foot-high inflatable rubber dam that is bolted to the existing concrete structure. This rubber dam allows for the normal storage of water in the reservoir with the ability to be lowered during extreme storm events. The rubber dam has an approximate service life of twenty years and is therefore now due for replacement. The aging intake tower structure has been inspected and evaluated. Recommended repairs include repair or replacement of intake trash racks and sealing/grouting of minor concrete wall cracks. This project was advertised for construction in July 2020 and Allegheny Construction was awarded the project. A Notice to Proceed was provided on October 1, 2020.

7. **MC Exterior Lighting Improvements**

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

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

The design has been completed by Hazen and Sawyer and the project was awarded to Pyramid Electrical Contractors, LLC.

Design and Bidding

8. <u>Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Raw Water Pump Station</u>

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.

9. <u>Beaver Creek Dam and Pump Station Improvements</u>

<u>Dam:</u> RWSA operates the Beaver Creek Dam and reservoir as the sole raw water supply for the Crozet Area. In 2011, an analysis of the Dam Breach inundation areas and changes to Virginia Department of Conservation and Recreation (DCR) *Impounding Structures Regulations* prompted a change in hazard classification of the dam from Significant to High Hazard. This change in hazard classification requires that the capacity of the spillway be increased. This CIP project includes investigation, preliminary design, public outreach, permitting, easement acquisition, final design, and construction of the anticipated modifications. Work for this project will be coordinated with the new relocated raw water pump station and intake and a reservoir oxygenation system project.

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

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

available, could cover up to 65% of final design and construction costs.

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

10. 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.

11. South Fork Rivanna River Crossing

RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 29 Solutions projects, including approximately 10,000 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.

12. MC Clarifier and Lime Silo Demolition

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

13. <u>MC Generator Fuel Expansion</u>

The Moores Creek AWRRF south side electrical facilities have a single large system back-up power generator that was installed between 2009 – 2012 during the ENR plant upgrade. The generator has a belly tank that allows for approximately 22 hours of operation. This project will install an ancillary fuel tank that will allow for approximately three days of operation.

14. <u>MC Facility Renovations</u>

The RWSA Administration Building Board Room finishes are generally original to the facility. The proposed project will update the wall and floor coverings, alter the shelving and update the room furnishings in order to create a more modern and useable meeting space.

The Duty Pump Station was construction in 1958 and no longer functions as an actual pump station. It currently houses electrical equipment that serves the plant, but otherwise has available space that could be beneficially used for other purposes. RWSA has a need for additional office space and has evaluated repurposing portions of the Duty Pump Station for office and work space in order to make use of all available space at the plant before proceeding with more significant administrative expansions. This project includes demolition of a select portion of the interior of the station, cleaning and sanitizing of the areas to be repurposed, and an interior upfit of the space to provide additional office and work space. Costs related to this effort have been updated and the budget is being evaluated through the CIP process.

15. <u>MC 5 kV Electrical System Upgrades</u>

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.

16. <u>Glenmore WRRF Influent Pump and VFD Addition</u>

The 0.381-mgd water resource recovery facility, located within the Glenmore subdivision, is operated by RWSA. The facility includes an influent pumping station located immediately adjacent to the treatment facility. The Glenmore WRRF is predicted to see additional dry and wet weather flows as

construction within the service area continues. Future wet weather flows will require higher influent pumping capacity and an additional pump and electrical variable frequency drive will be required to maintain firm capacity. After discussions with the Operations and Maintenance departments, installation of a new exhaust fan in the influent pump station will also be included. A work authorization for this project has been finalized and design is underway.

Planning and Studies

17. 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.

18. Urban Finished Water Infrastructure Master Plan

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

19. 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 to be located on County property (baseball field

and County Office Building) adjacent to McIntire Road or within McIntire Road.

20. <u>Asset Management Plan</u>

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.

21. <u>Albemarle-Berkeley PS Capacity Analysis</u>

The Albemarle Berkley wastewater pump station serves the schools and other connections in the area near Albemarle High School. Due to unacceptably high run times on the pumps, a capacity analysis of the pump station, given the current and projected upstream conditions, will be completed to provide design data for replacement of the pump station.

The Capacity Analysis Study began in Spring 2020, and the first report draft was reviewed by staff in September 2020. A final draft was issued to RWSA/ACSA/ACPS by the Design Consultant in December 2020, and comments were received in January 2021.

22. <u>MC Facilities Master Plan</u>

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

23. <u>SRR to RMR Pipeline – Pretreatment Pilot Study</u>

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.

24. <u>Central Water Line Project – Routing Study</u>

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

<u>Other Significant Projects</u>

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

- <u>South Rivanna Dam Apron and River Bank Repairs</u>

  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 river bank 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 river bank and removal of the rock dam were completed June 3-7, 2019 under RWSA's on-call construction contract.

- <u>Urban Water Line Valve and Blow-off Repair</u>

  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.

26. <u>Interceptor Sewer and Manhole Repair</u>

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

Lining work on the Upper Morey Creek Interceptor began in Fall 2019 and was completed in Fall 2020. A critical section of upper Morey Creek Interceptor under Rt. 250 was lined on August 28, 2020.

27. <u>Security Enhancements</u>

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

RWSA Engineering staff held a meeting with Operations staff to discuss overall project needs and priorities in October 2018. Meetings with ACSA and City staff were held in Fall/Winter 2018-2019 to discuss how access control and intrusion detection systems have been implemented into to the day-to-day operations of the two utilities. A Request for Proposal (RFP) for an Implementer to facilitate selection of an access control system, confirmation of design requirements based upon RWSA's facilities and project goals, and installation of the selected system was issued on June 6, 2019. RWSA conducted a Pre-Proposal Meeting on June 14, 2019, and proposals were opened on June 27, 2019. Interviews were conducted on July 15-16, 2019, and a Contract Award Recommendation was approved by the Board on July 23, 2019. Access Control System Installation at MCAWRRF began in March 2020. Access Control System Installation was completed in the Administration and Engineering Buildings by the week of November 30, 2020, completing installation of the physical access control system across the MCAWRRF site. Training for staff was completed on November 10, 2020.

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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 FEBRUARY 2021**

DATE: **MARCH 23, 2021**

The monthly and average daily Urban water system usages by the City and the ACSA for February 2021 were as follows:

	Month	***Daily Average***	
City Usage (gal)	121,947,145	4,355,255	**52.2%**
ACSA Usage (gal)	111,785,798	3,992,350	**47.8%**
Total (gal)	**233,732,943**	**8,347,605**	

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 March 2020), and that usage relative to the maximum allocation for each party (6.71 MGD for the City and 11.99 MGD for ACSA).

Staff noted a significant shift in the relative water usage by the City and ACSA in the month of February 2021. A similar shift was noted in February 2020, but to a lesser degree. Staff is reviewing a number of factors that may be contributing to this temporal shift, including but not limited to impacts of colder weather on retail usage, lingering impacts of the COVID-19 pandemic, fire/rescue activities, water line breaks and repairs, and individual wholesale meter site readings and will report any anomalous findings to the Board in future months.

NOTE: Meter site #32, located on Fontaine Avenue, did not read data from 2/24/2021 to 2/28/2021. Those missing values were calculated based on the average daily flow through that meter for the remainder of the month. Staff is working to diagnose and repair the issue as soon as possible to maintain data continuity.

Figure 1: City of Charlottesville Monthly Water Usage and Allocation

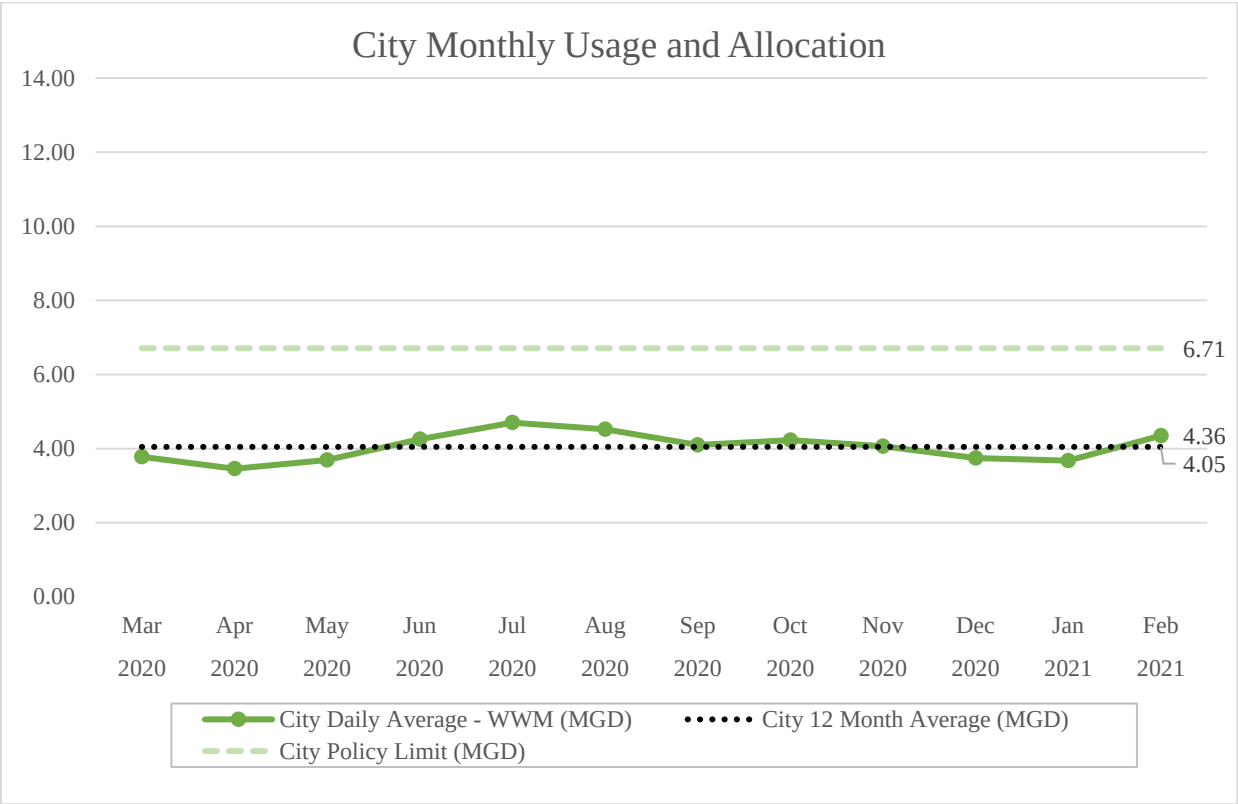
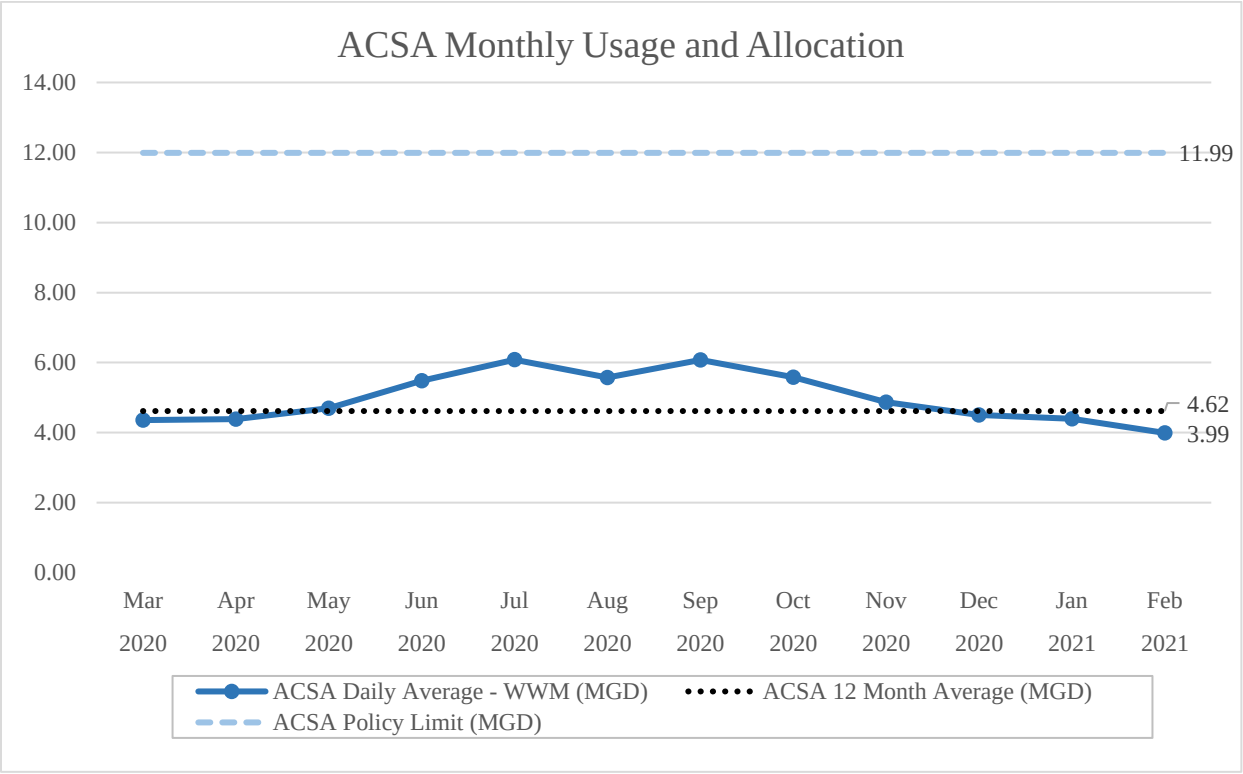


Figure 2: Albemarle County Service Authority Monthly Water Usage and Allocation



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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

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

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: CONTRACT AWARD - TERM CONTRACT ON-CALL MAINTENANCE CONSTRUCTION SERVICES

DATE: MARCH 23, 2021

RWSA owns and operates approximately 68 miles of water lines and 44 miles of gravity sanitary sewer lines, to include over 400 water isolation valves and 700 sanitary sewer manholes. While RWSA has a skilled Maintenance Department and an ongoing Line Maintenance Program, it lacks the resources necessary to perform routine maintenance on all of RWSA's infrastructure while also responding to miscellaneous and sometimes emergency situations associated with the water distribution and sanitary sewer interceptor systems. In addition, the RWSA Maintenance Department does not have the equipment necessary to perform work on some of the larger infrastructure within the RWSA system or in some of the more difficult locations or terrain in which the infrastructure can be located. To further augment the capabilities of RWSA's Maintenance Department, staff issued a Request for Proposals (RFP) for On-Call Maintenance Construction Services. RWSA procured these services in 2016, however the contracts associated with the original procurement are set to expire soon.

The RFP was developed and advertised with proposals due on February 22, 2021. RWSA received three proposals. The selection committee reviewed proposals provided by the three contractors, and determined that Faulconer Construction Company and Digs, Inc. were the most meritorious candidates. Both firms are centrally located in Charlottesville and have experience working on and around RWSA infrastructure. Faulconer Construction Company currently holds RWSA's On-Call Maintenance Construction Services Contract and has performed numerous complex repairs for RWSA in the past five years. While Digs has not previously held an On-Call Maintenance Construction Services Contract with RWSA, they have performed several projects for RWSA in the past. Given the experience that both Contractors have with RWSA, City of Charlottesville, and ACSA infrastructure, staff believes that both Contractors are well qualified to handle any urgent or emergency conditions that RWSA's water distribution and sanitary sewer interceptor systems may provide in a well-coordinated, safe, and effective manner. In addition, having both Contractors under contract will help minimize scheduling conflicts and ensure prompt response to urgent and emergency situations. The term of each contract will be for two years, with the option for three one-year renewals.

Construction Work Authorizations will be issued to each contractor for each task with costs based on approved labor and equipment rates submitted with the RFP responses.

Board Action Requested:

Authorize the Executive Director to execute contracts with an initial term of two years with options to annually renew the contract for a total term not to exceed five years with both Faulconer Construction Company and Digs, Inc. for On-Call Maintenance Construction Services.

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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

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

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: TERM CONTRACT – RESERVOIR ALGAL MANAGEMENT SERVICES: SOLITUDE LAKE MANAGEMENT

DATE: MARCH 23, 2021

Our Water Manager provides a comprehensive reservoir management program, which includes proactively monitoring the conditions conducive to harmful algal blooms (HABS), and treatment of those blooms when they occur. Our primary tool to minimize these blooms is application of an algaecide to the water surface from a small boat. Through our monitoring program, we utilize algaecide applications only when the conditions in the reservoir indicate it is necessary.

To competitively procure these services, a Request for Proposals (RFP) for Competitive Negotiation was advertised on February 24, 2021. RWSA received one proposal. Based on the qualifications listed in the proposal, and previous experience working with the company, staff have determined that Solitude Lake Management meets the qualifications required in the RFP. Solitude has worked with RWSA since 2014 providing similar services and similar pricing with good success. The term of this contract is one year, with the option for four one-year renewals.

Board Action Requested:

Authorize the Executive Director to execute a contract with Solitude Lake Management to provide reservoir management services.

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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: ANDREA BOWLES, WATER RESOURCES MANAGER

REVIEWED BY: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: BUCK MOUNTAIN PROPERTY MANAGEMENT UPDATE

DATE: MARCH 23, 2021

This memo and presentation are to provide an update on the Buck Mountain Property Management Plan for the 1314-acre property along Buck Mountain Creek, owned by the Authority since the 1980s. The property was originally purchased 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, 600 acres, was placed in restrictive use deeds in 2014 to mitigate the environmental impacts from construction of the expanded Ragged Mountain reservoir.

At the April 2019 Board meeting, 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. As a follow-up to this request, staff provided a presentation on the Buck Mountain property at the June 2019 Board meeting. During the June meeting, the Board requested staff to prepare a Buck Mountain Master Plan to consider possible uses of the property.

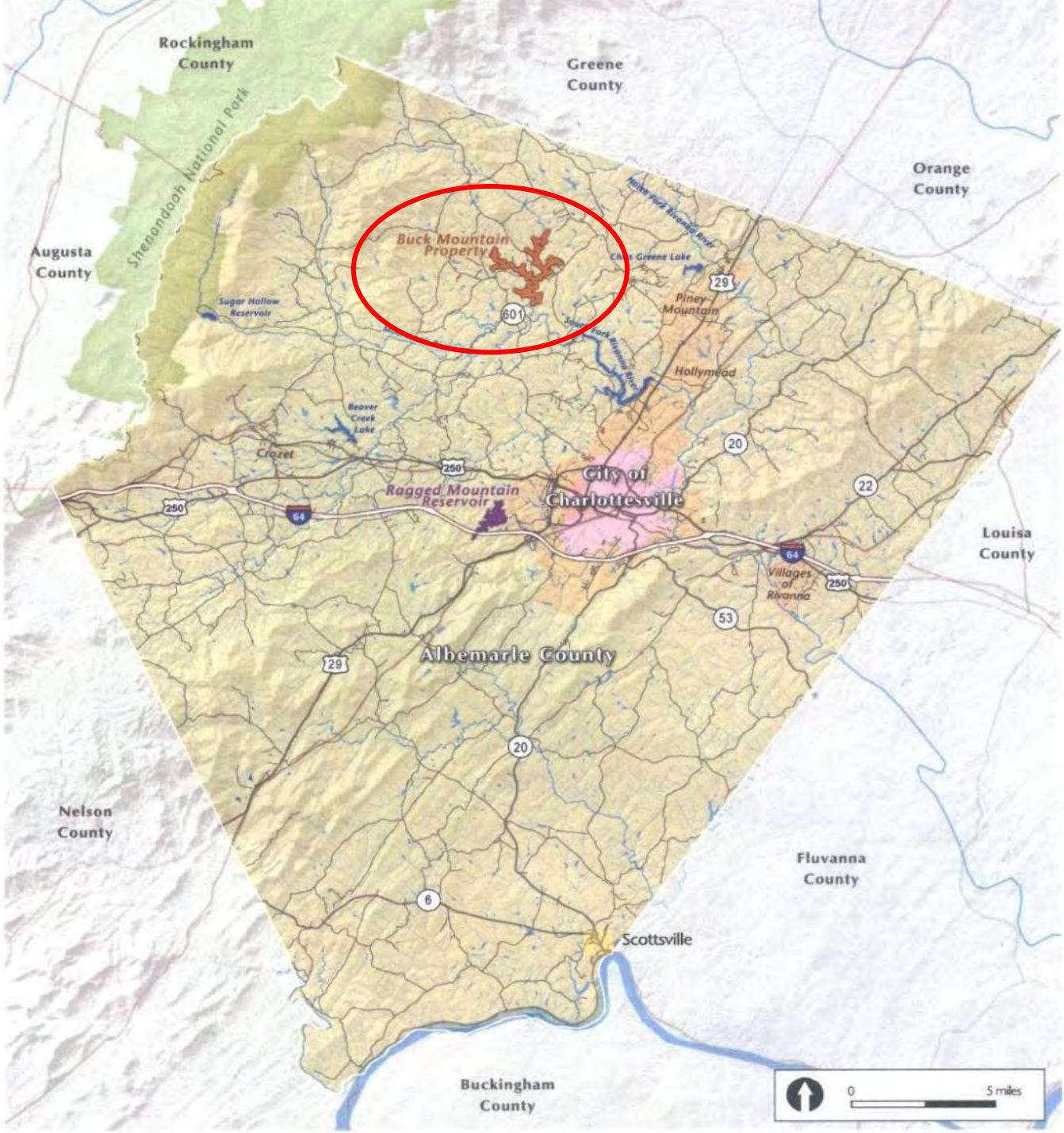
The Buck Mountain Master Plan was presented to the Board in August 2020.The Board then requested staff to develop a Property Management Plan for the property. A local planning consultant, Land Planning & Design Associates, was hired to complete the Management Plan. This presentation will provide an update to the Board on the work on that Plan. The primary topics to be discussed include:

- Leases
- Potential sale of small lots, including the Buck Mtn. house and property
- Use of a private road that crosses our property, Allen Farm Road, as well as safety concerns for any traffic using the bridge also on our property

<u>Board Action Requested:</u>

Offer any guidance on the property management recommendations.

Buck Mountain Property Management Update



Presented by:

Andrea Bowles, Water Resources Manager

Valerie Long, Williams Mullen

Bill Mechnick & Tristan Cleveland, LPDA

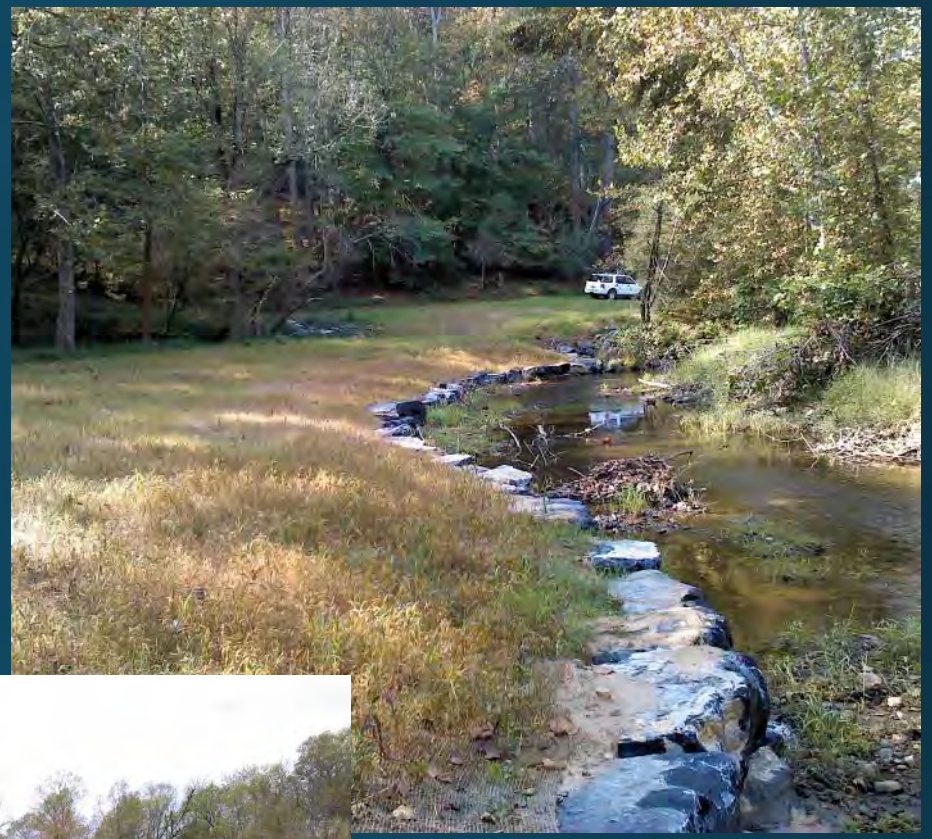
March 23, 2021

The Property

- RWSA acquired 38 parcels in the Buck Mountain Creek watershed in 1984 – 87
- Parcels range from 1 to 160 acres
- 1,314 total acres: Cost = $6.95 M
- Presence of the James spinymussel, a state and federally listed endangered species, prevented construction of the water supply reservoir

Current Uses

- Stream mitigation for Ragged Mtn Reservoir dam impacts in 2014
- Stream restoration of 500 linear feet along Buck Mtn Creek
- Buffer enhancement and preservation of riparian habitat along 80,000 linear feet of stream
- Planted 93 acres with over 40,500 trees
- Placed buffer areas in deed restrictions (approx. 600 acres)



Master Plan

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

<u>Strategic Plan Goals</u>

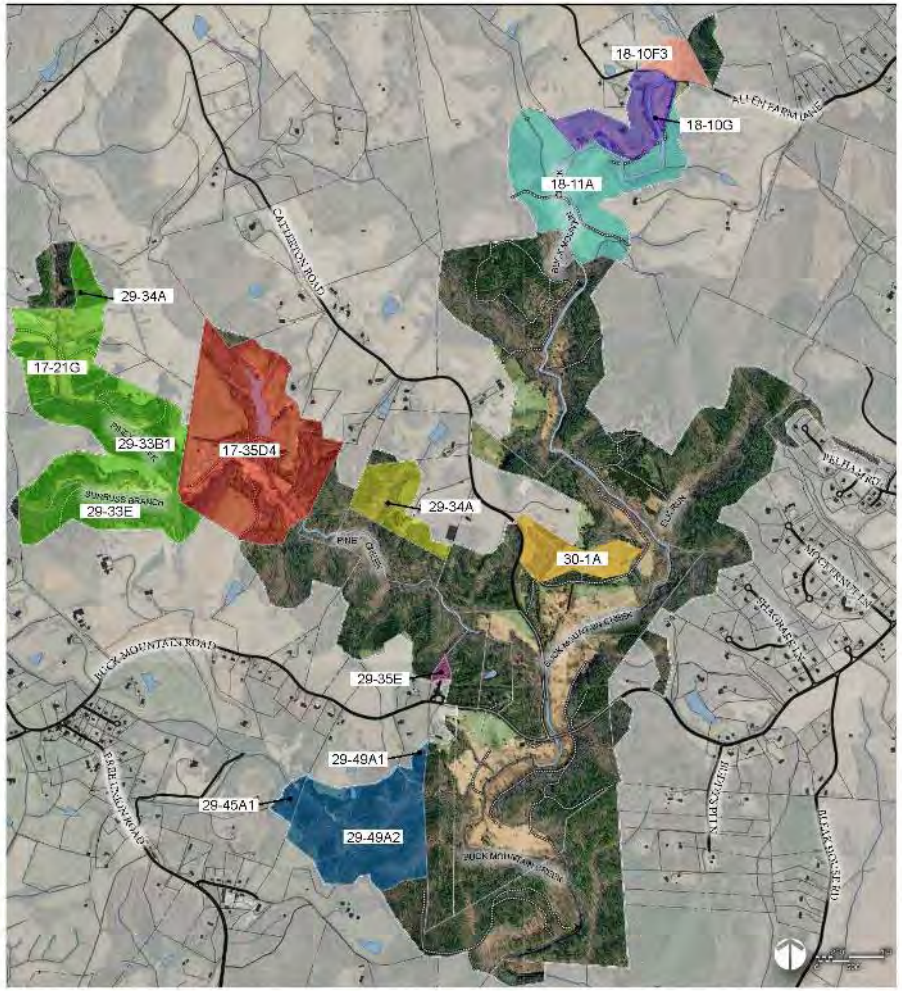
- Environmental Stewardship
  - Water Quality Protection
- Operational Optimization
  - Efficient and sustainable use of resources
- Infrastructure and Master Planning
  - Water Supply now and in the future

Property Management Issues

- Parcel Leases
- Sale of Small Lots/Buck Mtn. house
- Allen Farm Lane and Bridge

Existing Leases

- 15 parcels leased by 9 leaseholders totaling 484.41 acres: 2-year terms
- 8 parcels are in agriculture (cattle or horses). Remainder are used for quiet enjoyment
- Leases currently generate $1,900 annually
- Recommendation:
  - 1. Update current leases to market value when renewed
  - 2. Evaluate additional parcels for leases



Lessee	Parcel #	Parcel Tax ID	Total Parcel Acreage	Leased Acreage
Robyn North	17-35D4	01700-00-00-35D4	117.95	117.918
Charles Durham Jr	29-34A	02900-00-00-034A	25.12	25.12
Phillip and Melissa Johnson	29-33E	02900-00-00-033E0	27.72	27.724
	17-21G	01700-00-00-021G0	24.51	24.507
	17-21D	01700-00-00-022D0	18.136	18.136
	29-33B1	02900-00-00-33B1	63.02	63.016
Dave and Virginia Ashcom	30-1A	01700-00-00-35D4	159.96	20

Lessee	Parcel #	Parcel Tax ID	Total Parcel Acreage	Leased Acreage
Jerry E. Mooney, Susan McCarson	18-10G	01800-00-00-10G	27.36	27.563
Kenneth Wayne McCauley	29-35E	02900-00-00-35E0	1.36	1.340
Lawrence S. Miller and Deborah L. Miller	29-49A2	02900-00-00-049A2	59.87	59.888
	29-45A1	02900-00-00-45A1	2.63	2.631
	29-49A1	02900-00-00-49A1	1.446	1.445
Harry Wilson	18-11A	01800-00-00-011A0	88.75	88.75
Mary Wilson	18-10F3	01800-00-00-011A0	8.56	8.53

RIVANNA WATER & SEWER AUTHORITY

BUCK MOUNTAIN MASTER PLAN
LEASED PARCELS
ALBEMARLE COUNTY, VIRGINIA

LPDA LANDSCAPE ARCHITECTURE LAND PLANNING

Lease Fee Schedule

Land Use	Current Leasing Schedule	Market
Pasture	$10/acre	$17.50-$20.00/acre
Forested	$3/acre	$13.00-$21.00/acre
Deed Restricted Area	$0/acre	$9.40/acre -$15.00/acre
Total Lease Value	$1,900/year	$6,300-$8,800

Sale of Lots/ Buck Mtn. House

Review

- Parcels with highest market potential
- Total acreage: 46.1
- Assessed value = $655,600
- Average value = $14,200/acre

Update

- Parcels have a minimum of the denoted Development Rights: can subdivide 2 acre lots with public road frontage
- The value of the house parcel (29-35h) and property is estimated to be $243,000 -$325,000.

Recommendation

- Demolish house and sell 1-5 lots

Piney Creek

Deed Restricted Area

Example 2-acre lots

Not to Scale

Allen Farm Lane & Bridge

History

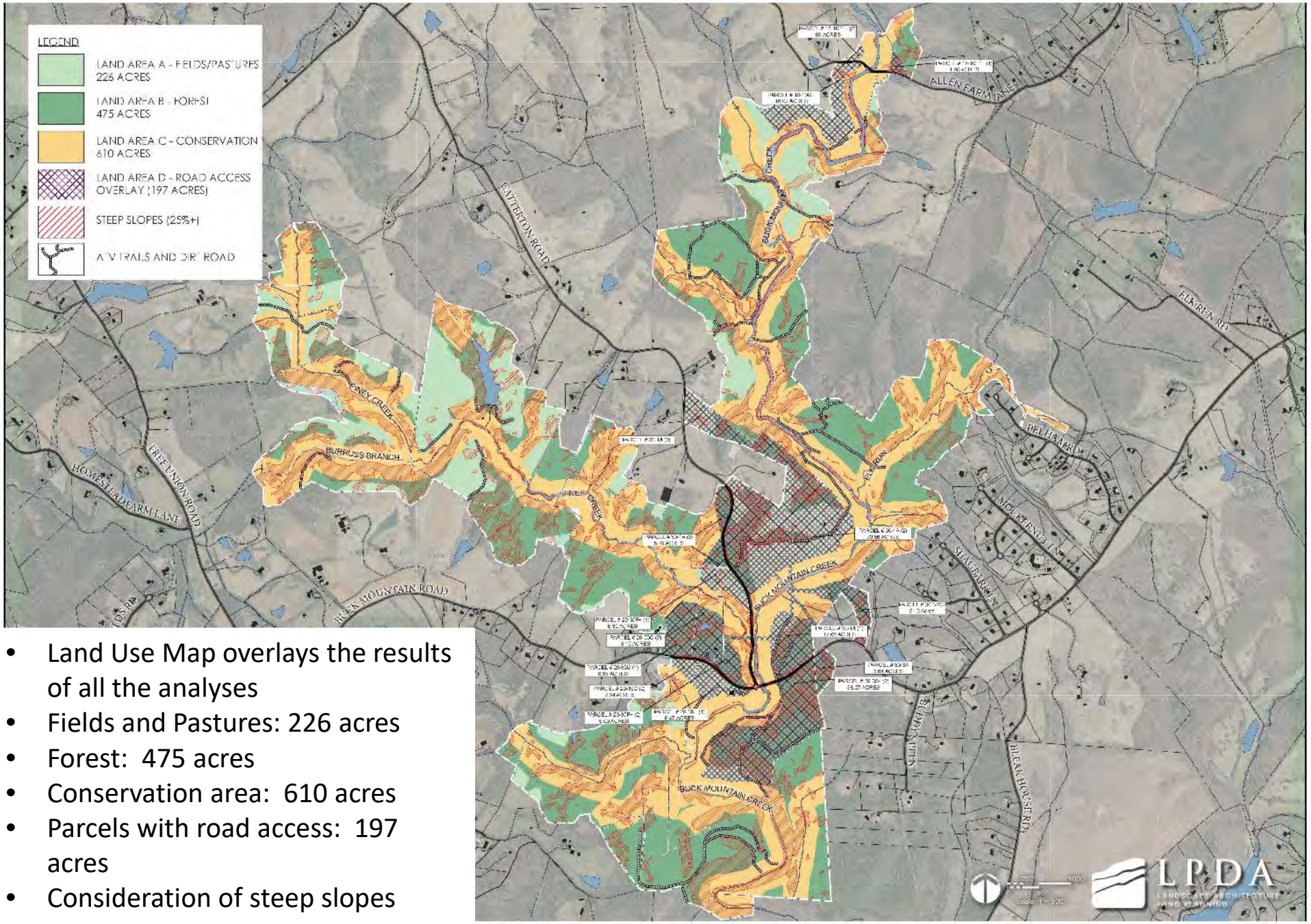
- Residents along Allen Farm Lane currently use the private road and bridge located on our property for access and egress to their properties.

Update

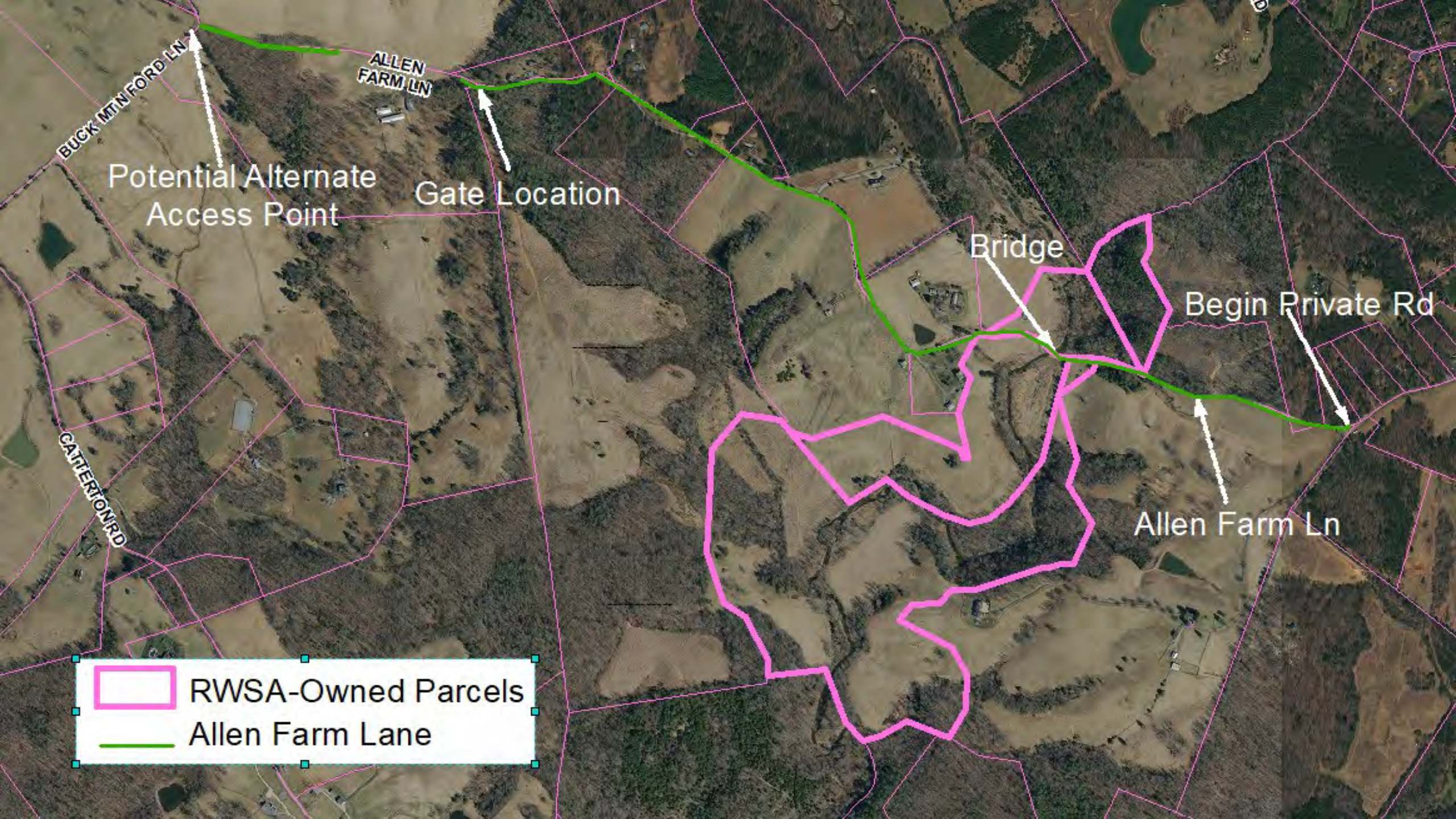
- Residents potentially have the right to use the road across RWSA property
- RWSA does not have a legal obligation to maintain road or bridge
- Bridge has a history of needing structural repairs and is within the floodplain; it is substandard to VDOT design parameters. Load limits and safety and liability concerns exist.
- Removal of bridge estimated to cost $50,000
- Replacing bridge with a robust low water crossing estimated to cost $50,000, with a new bridge at $800,000
- Residents may have an alternate access

Recommendation

- Remove the bridge in 2024, after mitigation plan acceptance, and/or consider bridge and road ownership transfer



- Land Use Map overlays the results of all the analyses
- Fields and Pastures: 226 acres
- Forest: 475 acres
- Conservation area: 610 acres
- Parcels with road access: 197 acres
- Consideration of steep slopes


BUCK MTN FORD LN
ALLEN FARM LN
Potential Alternate Access Point
Gate Location
Bridge
Begin Private Rd
Allen Farm Ln
CATTERTON RD
RWSA-Owned Parcels
Allen Farm Lane

Questions?

Drinking Water Treatment Update

PRESENTED BY:

DAVE TUNGATE, DIRECTOR OF OPERATIONS

BOARD OF DIRECTORS MEETING

MARCH 23, 2021

RIVANNA WATER & SEWER AUTHORITY

Corrosion Inhibitor

- Product fed at the water treatment plants to reduce the corrosivity of the drinking water. It prevents lead and copper from leaching from pipes and plumbing fixtures into the water.

- There are several types of corrosion inhibitor products. RWSA has been feeding a poly-phosphate product for more than 30 years with exceptionally low lead and copper levels.

- After an operational optimization review, RWSA transitioned to an orthophosphate product in December 2019.

Corrosion Control Update

Corrosion Inhibitor Transition Date		
Water System	**Blended Product**	**Ortho only**
Crozet	12/2/2019	02/1/2021
Scottsville	09/9/2020	09/2021
Urban	02/1/2021	02/2022

Water Treatment Plants

Water Treatment Plant	Capacity in Million Gallons per Day
South Rivanna	12 *
Observatory	7.7 *
North Rivanna	2.0
Crozet	2.0
Scottsville	0.25
Red Hill Well Field	0.006
Water Plant Operators	**26.4**

*- under renovation

Drinking Water Quality Samples

- Water Operations staff uses online instruments and hundreds of daily grab samples to measure water quality during the treatment process.

- RWSA staff collect over 1,600 water quality samples annually in the water distribution system.

Recently Installed Sampling Stations

- **Crozet System**
  - Field School of Charlottesville
- **Urban System**
  - Boar’s Head
  - State Farm Timberwood
  - Emerson
  - UVA Transitional Care Hospital
  - Farmington Country Club
  - Glenmore Country Club

Sampling Stations to be Installed Spring 2021

- **UVA System**
  - Adjacent to UVA Law School

- **Urban System**
  - Albemarle High School
  - Jefferson Park Avenue to replace UVA Hospital
  - UVA Research Park on Fontaine Avenue
  - Elliot Avenue/ 1st Street South

Granular Activated Carbon (GAC)

- 492,000 pounds of GAC in service every day
- GAC replacement cost is $1.36/lb for virgin GAC or $1.07 for reactivated GAC

Questions?

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MEMORANDUM

TO: RIVANNA WATER & SEWER AUTHORITY BOARD OF DIRECTORS

FROM: BILL MAWYER, EXECUTIVE DIRECTOR

SUBJECT: INTRODUCTION OF PROPOSED BUDGET FOR FY 2021-2022, AND ADOPTION OF PRELIMINARY RATE SCHEDULE

DATE: MARCH 23, 2021

The proposed FY 2021-2022 budget totaling $38,951,000 is being submitted for your consideration. The proposed budget includes $20,533,000 for Operating expenses and $18,418,000 for Debt Service charges, and represents a 4.9% increase above the current budget.

The proposed budget includes resources required to manage our infrastructure, meet debt service obligations, comply with regulatory mandates, and invest in our workforce. Wholesale water and wastewater services will be provided to the City of Charlottesville and the Albemarle County Service Authority (ACSA) in a collaborative, effective, and fiscally responsible manner. The proposed budget includes a $1.15 million increase in Operating expenses primarily to replace and add important equipment, maintain capital assets, and support our workforce. Debt Service costs will increase $689,000 to support ongoing renovations to our water treatment plants (Crozet, S. Rivanna and Observatory), as well as completion of the Crozet Flow Equalization Tank and the Beaver Creek Dam Improvements projects, both of which are required to meet regulatory standards for wastewater and dam safety, respectively. Charges to the City will increase 7.6%, and charges to the ACSA will increase 14.3% to support these essential services.

The Board will be asked at this meeting to adopt the attached Preliminary Rate Resolution which sets a public hearing on the proposed budget for Tuesday, May 25, 2021, and authorizes staff to advertise the attached Public Notice showing the proposed wholesale rates required to support the proposed budget. As required by Virginia law, staff will advertise the Public Notice twice in the local newspaper followed by a minimum 14-day period in advance of the scheduled public hearing. Adoption of the Preliminary Rate Resolution does not prejudice final Board actions on the budget, including amendments or changes to the proposed budget the Board may want to consider later. The Board's final deliberations and actions on the budget will not be requested until immediately after the public hearing.

Board Action Requested:

Adopt the attached Preliminary Rate Schedule, authorize the advertising of proposed rates in the local newspaper, and schedule a public hearing on the budget during the Board's regular meeting on May 25, 2021.

Attachments

RIVANNA WATER & SEWER AUTHORITY
695 Moores Creek Lane | Charlottesville, Virginia 22902-9016
434.977.2970
434.293.8858
www.rivanna.org

R E S O L U T I O N

PRELIMINARY RATE SCHEDULE

WHEREAS, the Rivanna Water and Sewer Authority Board of Directors has reviewed the proposed budget and associated rate changes for Fiscal Year 2021-2022; and

WHEREAS, Section 15.2-5136 (G) of the Code of Virginia requires the adoption of the preliminary rate schedule for notification of a public hearing prior to fixing rates for water and sewer charges; of which there is at least a 14 day requirement between the date of the last of two public notices and the actual date fixed for the public hearing;

NOW, THEREFORE, BE IT RESOLVED that the Rivanna Water and Sewer Authority hereby approves the preliminary rate schedule for purposes of notification of a public hearing to be held on May 25, 2021 at 2:15 p.m. during the regularly scheduled Board of Directors meeting.

Water Rates & Charges

Urban Area

ACSA & City	Operating	$	2.346	Per 1,000 gallons
City	Debt Service	$	246,188	Per month
ACSA	Debt Service	$	388,956	Per month

Crozet

ACSA	Operating	$	88,238	Per month
ACSA	Debt Service	$	153,986	Per month

Scottsville

ACSA	Operating	$	42,892	Per month
ACSA	Debt Service	$	11,574	Per month

Wastewater Rates & Charges

Urban Area

ACSA & City	Operating	$	2.517	Per 1,000 gallons
City	Debt Service	$	412,199	Per month
ACSA	Debt Service	$	301,820	Per month

Glenmore

ACSA	Operating	$	33,669	Per month
ACSA	Debt Service	$	618	Per month

Scottsville

ACSA	Operating	$	27,189	Per month
ACSA	Debt Service	$	824	Per month

PUBLIC NOTICE

RIVANNA WATER & SEWER AUTHORITY
PUBLIC HEARING CONCERNING THE
PROPOSED RATES FOR FY 2021 - 2022, EFFECTIVE JULY 1, 2021

Public Hearing:
Rivanna Water & Sewer Authority will hold a Public Hearing on Tuesday, May 25, 2021, at 2:15 p.m. during the regular Rivanna Water & Sewer Authority Board of Directors meeting. The public hearing is to consider the following wholesale water and wastewater rates and charges to the City of Charlottesville and the Albemarle County Service Authority. Adopted rates may or may not be what are advertised.

URBAN RATE CENTERS		FY 2021	FY 2022	$ Change	% Change
Operating Rates	($ per 1,000 Gallons)				
Operations	Water	$ 2.095	$ 2.346	$ 0.251	11.98%
Operations	Wastewater	2.369	2.517	0.148	6.25%
Debt Service Charges	($ Monthly Charge)				
Water					
Debt Service	CITY	$ 193,580	$ 246,188	$ 52,608	27.18%
Debt Service	ACSA	321,303	388,956	67,653	21.06%
Wastewater					
Debt Service	CITY	$ 407,588	$ 412,199	$ 4,611	1.13%
Debt Service	ACSA	278,174	301,820	23,646	8.50%

OTHER RATE CENTERS (Monthly)	FY 2021	FY 2022	$ Change	% Change
Crozet Water				
Operations	$ 85,734	$ 88,238	$ 2,504	2.92%
Debt Service	109,276	153,986	44,710	40.91%
Scottsville Water				
Operations	$ 43,401	$ 42,892	$ (509)	-1.17%
Debt Service	10,729	11,574	845	7.88%
Water Total	$ 249,140	$ 296,690	$ 47,550	19.09%
Glenmore Wastewater				
Operations	$ 30,877	$ 33,669	$ 2,792	9.04%
Debt Service	315	618	303	96.19%
Scottsville Wastewater				
Operations	$ 25,749	$ 27,189	$ 1,440	5.59%
Debt Service	787	824	37	4.70%
Wastewater Total	$ 57,728	$ 62,300	$ 4,572	7.92%
Total Monthly Other Rate Center Charges - ACSA	**$ 306,868**	**$ 358,990**	**$ 52,122**	**16.99%**

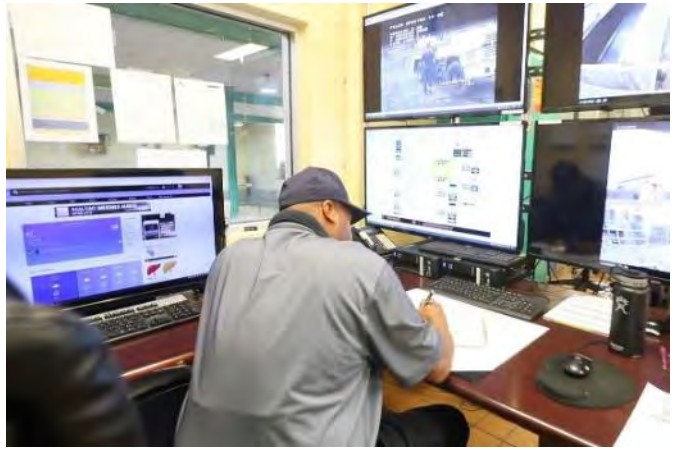
The Rivanna Water & Sewer Authority (Rivanna) was created by the City of Charlottesville (City) and the County of Albemarle to supply and treat water for drinking and to provide wastewater treatment. The above fees represent Rivanna's fees and charges to the City and the Albemarle County Service Authority (ACSA) for these services and are not the same as the City and ACSA charges to individual residents and businesses. Debt Service covers capital related project costs and are different for the City and ACSA reflecting terms of contractual agreements.

The City and the ACSA distribute drinking water and collect wastewater from individual residents and businesses and charge retail rates that combine charges from the above schedule to reflect their service costs, including Rivanna's costs.

Information about the proposed budget may be obtained on the Rivanna website at rivanna.org. Please call 977-2970 ext. 0 or send e-mail to info@rivanna.org with any questions you may have.

Proposed Operating Budget

FY 2021 - 2022



PRESENTED TO THE BOARD OF DIRECTORS

BY BILL MAWYER, EXECUTIVE DIRECTOR

MARCH 23, 2021

RIVANNA WATER & SEWER AUTHORITY

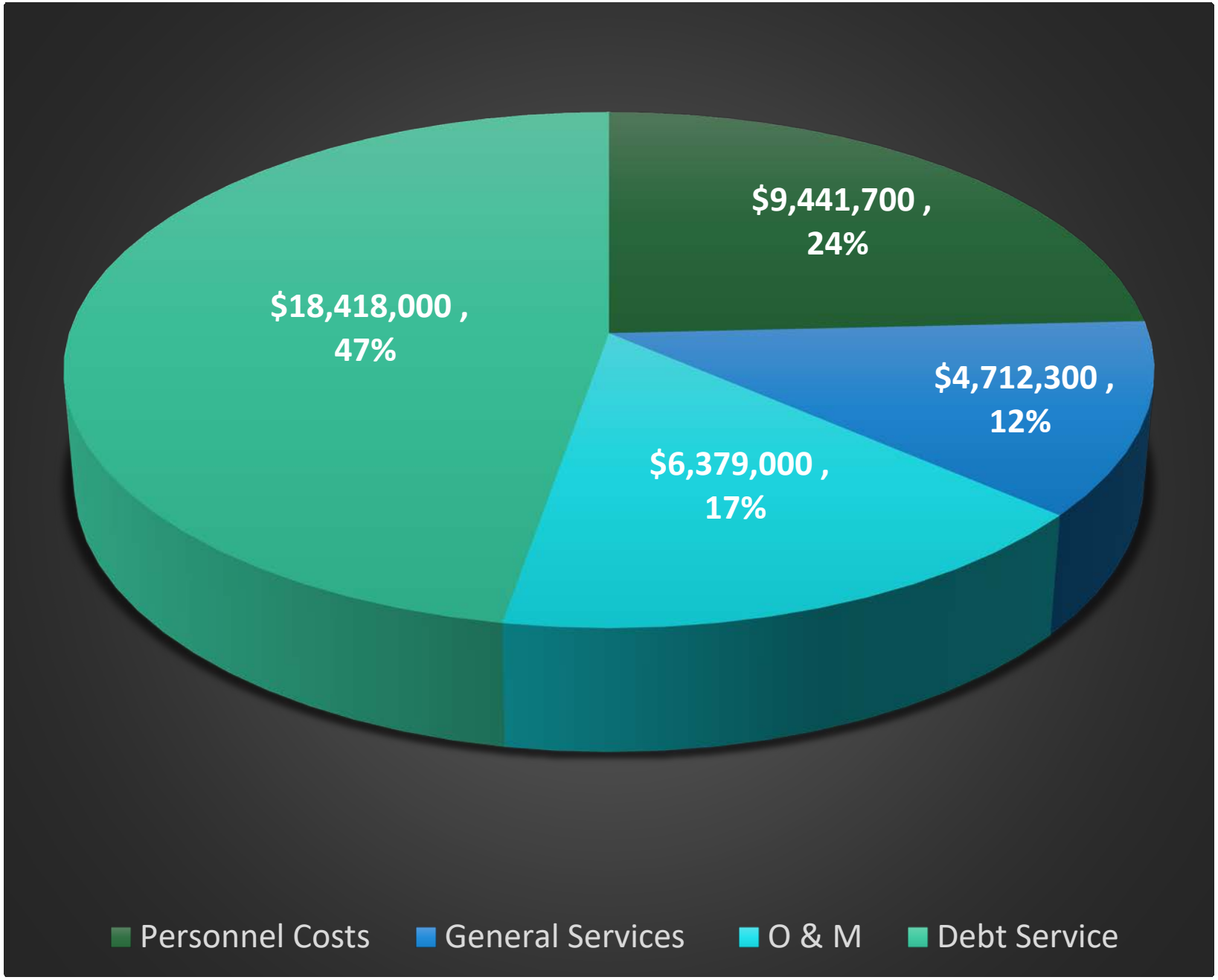
Operating Budget Summary
FY 2021 – 2022

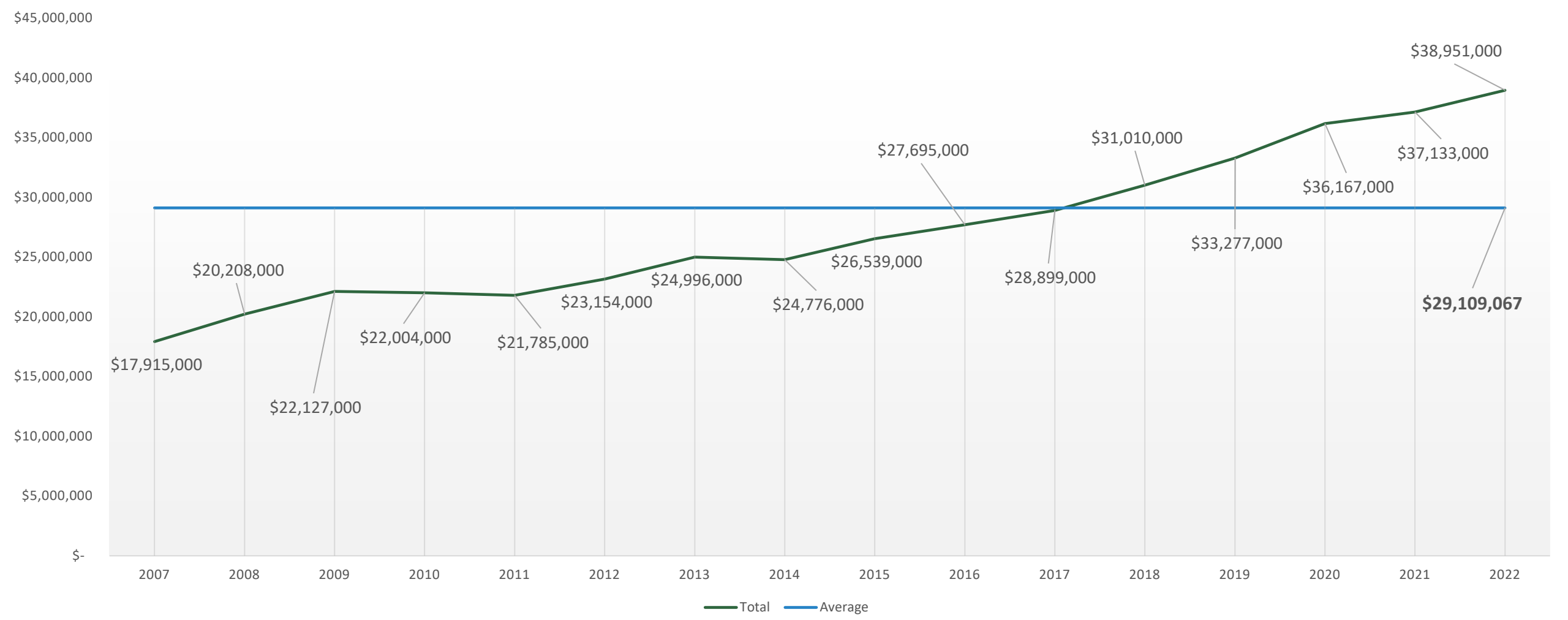
➢ Total budget	$38.9 m	$1.8 m increase = 4.9%
1. Expenses	$20.5 m	$1.1 m increase = 5.9%
2. Debt Service	$18.4 m	$0.7 m increase = 3.9%
3. Use of Reserve Funds	$516,250	$1.2 m decrease
4. Interest Income	$113,700	$0.7 m decrease
net budget change		$3.7 m
➢ City Charges	$15.9 m	$1.1 m increase = 7.6%*
➢ ACSA Charges	$21.1 m	$2.6 m increase = 14.3%*

** Actual Urban retail water and wastewater flows in FY 2020 resulted in a $259,700 shift in operating costs = 1.8% decrease for City and 1.4% increase for ACSA*

FY 2021 – 2022 Operating Budget

$38.9 M





Operating Budget – 16 Year History

Capital Assets: Facilities and Equipment $280 M

5 Water Supply Reservoirs:	3.3 billion gallons
6 Water Treatment Plants	
◦ 3 Urban Area:	21.7 = 24 MGD by 2023
◦ 3 Non-Urban Area	2.25 MGD
4 Wastewater Treatment Plants	
◦ 1 Urban Area:	15 MGD
◦ 3 Non-Urban Area:	0.588 MGD
7 Wastewater Pump Stations	
11 Water Pump Stations	
◦ 7 Raw Water	
◦ 4 Finished Water	
Water Distribution Pipe:	67 miles
Wastewater Collection Pipe:	42 miles
Stormwater Impoundment:	Lickinghole Creek Basin
Employees:	93.4

Completed in FY 2021

- No interruption of Water and WW treatment during pandemic: 24/7/365
- Crozet WTP Upgrade from 1 to 2 MGD*
- Rivanna Reservoir Dam Gate Repairs
- Emergency Response Plan required by Federal AWIA 2018
- Buck Mountain Property Master Plan
- MC Facilities Master Plan

”ACSA only” charge allocation

Major Projects in FY 2022

- Water Treatment Plant Renovations
  - South Rivanna and Observatory
- Crozet Flow Equalization Tank Construction*
- Airport Road Water Pump Station Construction
- Rivanna to Ragged Pipeline Easement Acquisitions**
  - *Birdwood to Old Garth WL Section, Design and Construction ***
- Central Water Line Alignment & Design (thru City)
- Beaver Creek Dam, Pump Station and Piping Design*
- Urban and Crozet* Va Water Protection Applications

** 100% ACSA allocation; ** 80% ACSA/20% City allocation*

Strategic Investments

Workforce:	$732 k
•Merit Pool for Staff (2%)	$426 k
o + FY 21 mid-year merit	
•Additional Positions	$273 k
o Accounting Associate	
o IT Administrator	
o Facilities Coordinator	
•Health Insurance	$33 k

Operations:	$475 k
•Equipment Replacement	$167 k
•Studies: Digesters, GAC, Arc Flash	$140 k
•Addn'l equipment	$93 k
•Software	$76 k
•OB WTP Lease	$75 k
•Buck Mtn Property Mgmt	$65 k

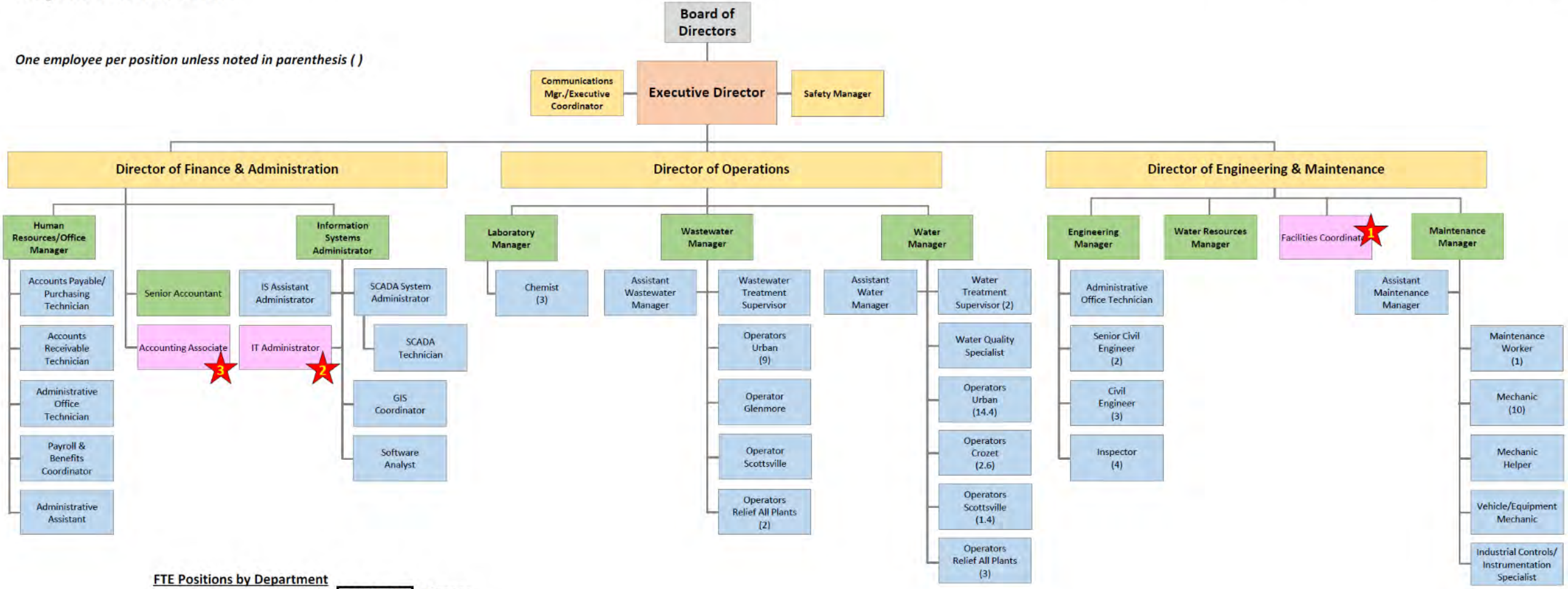
Rivanna Water & Sewer Authority

Organizational Chart

FY 2021-2022 Proposed Budget

v3

One employee per position unless noted in parenthesis ( )



FTE Positions by Department

Department	FY 20-21 FTE	FY 21-22 FTE	Change + / (-)
Finance/Admin.	11	12	1
IT/SCADA	6	7	1
Engineering	13	14	1
Maintenance	16	16	*No Change*
Operations	1	1	*No Change*
Laboratory	4	4	*No Change*
Wastewater	16	16	*No Change*
Water	26.4	26.4	*No Change*
Total	**93.4**	**96.4**	**3**

FY 2021-2022 FTE Changes

1. *Addition of an Facilities Coordinator (1 FTE) position, increasing the Engineering positions from 13 to 14 FTE.*
2. *Addition of an IT Administrator (1 FTE) position, increasing the IT/SCADA positions from 6 to 7 FTE.*
3. *Addition of an Accounting Associate (1 FTE) position, increasing the Finance/Administration positions from 11 to 12 FTE.*

(FTE = Full Time Equivalent)

Charges and Financial Summary

RWSA Charge Increase (%): FY	21	22	23	24	25	26
City	0	7.6	7.5	7.2	7.3	6.9
ACSA	0	14.3	8.7	8.8	8.9	8.3

- *Includes an annual increase in Operating expenses (avg. 8%)*

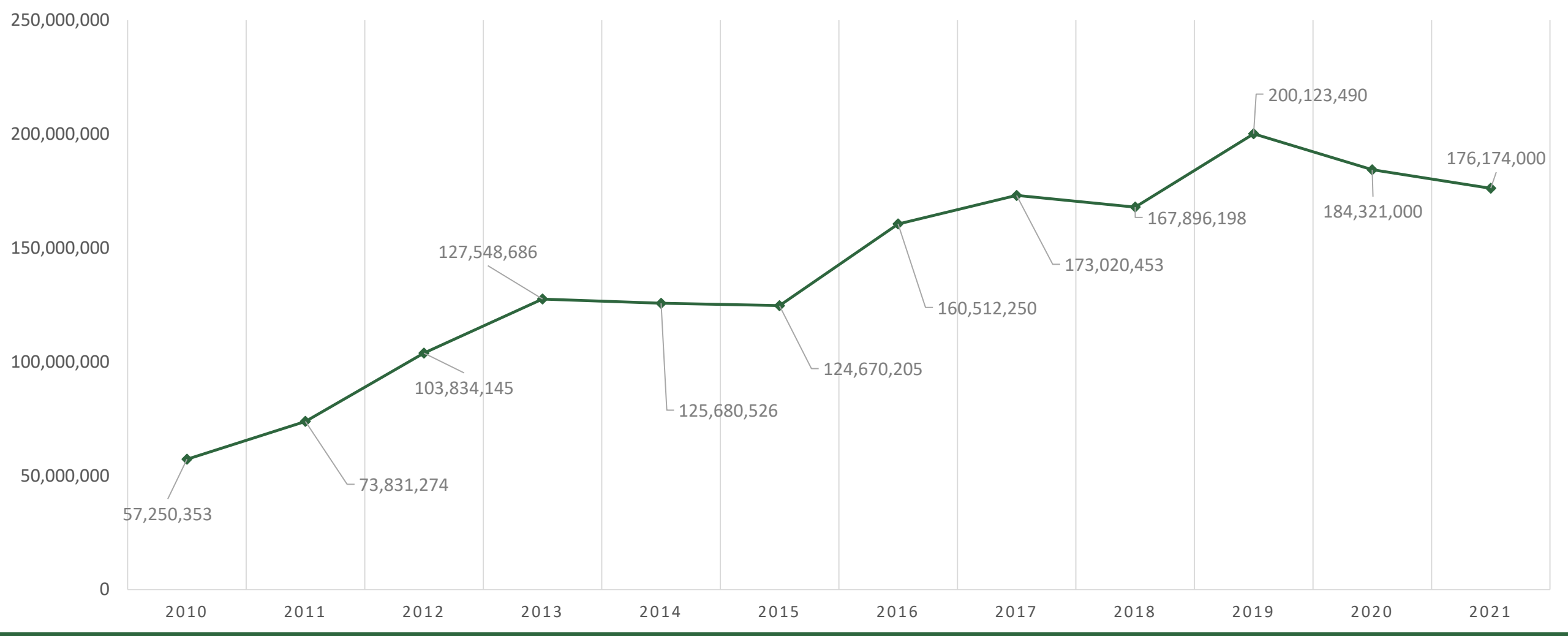
- Budget Increase in FY 22: 4.9%
- Use of Cash Reserves in FY 22: $516,250
- Capital Budget in FY 22: $25.8 M
- FY 22-26 CIP: $170.1 M
- New CIP Debt Anticipated: $129 M

* *Actual Urban retail water and wastewater flows in FY 2020 resulted in a $259,700 shift in operating costs = 1.8% decrease for City and 1.4% increase for ACSA*

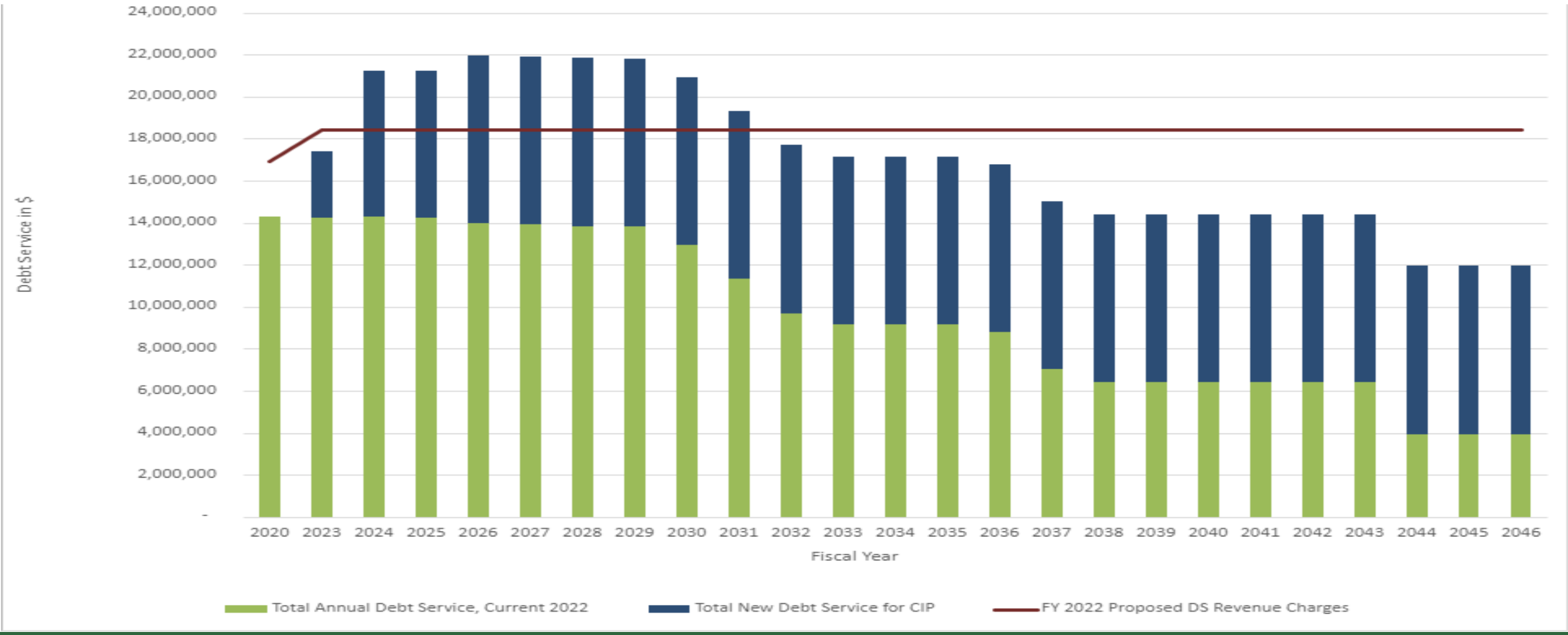
Rivanna to Ragged Pipeline Project
Impact to Charges: Deferred 5 years to 2032- 2037

Comparison
Percentage Estimated Increase in charges

City	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31
As Presented	-0.5%	7.6%	7.5%	7.2%	7.3%	6.9%	4.7%	4.3%	4.2%	2.3%	0.4%
RM to SF Pipeline 5 year shift	-0.5%	7.6%	7.5%	7.2%	7.2%	6.7%	4.2%	3.6%	3.3%	1.6%	0.0%
ACAS											
As Presented	0.4%	14.3%	8.7%	8.8%	8.9%	8.3%	5.5%	5.6%	5.6%	3.6%	2.6%
RM to SF Pipeline 5 year shift	0.4%	14.3%	8.7%	8.6%	8.6%	7.7%	4.4%	3.9%	3.5%	1.8%	1.9%



Outstanding Debt



Debt Service Profile FY 2020 - 2046

Budget Summary

FY 2021 – 2022

- Total budget $38.9 m, $1.8 m increase = 4.9%

1. Operating Costs	$20.5 m	$1.1 m increase = 5.9%
2. Debt Service	$18.4 m	$0.7 m increase = 3.9%
3. Use of Reserves	$516,250	

- City Charges $15.9 m, $1.1 m increase = 7.6%
- ACSA Charges $21.1 m, $2.6 m increase = 14.3%

RESOLUTION

PRELIMINARY RATE SCHEDULE

WHEREAS, the Rivanna Water and Sewer Authority Board of Directors has reviewed the proposed budget and associated rate changes for Fiscal Year 2021-2022; and

WHEREAS, Section 15.2-5136 (G) of the Code of Virginia requires the adoption of the preliminary rate schedule for notification of a public hearing prior to fixing rates for water and sewer charges; of which there is at least a 14 day requirement between the date of the last of two public notices and the actual date fixed for the public hearing;

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Urban Area

ACSA & City	Operating	$	2.346	Per 1,000 gallons
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ACSA	Operating	$	42,892	Per month
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Wastewater Rates & Charges

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Glenmore

ACSA	Operating	$	33,669	Per month
ACSA	Debt Service	$	618	Per month

Scottsville

ACSA	Operating	$	27,189	Per month
ACSA	Debt Service	$	824	Per month

Questions?

Action to be Considered by the Board:

Approval of the Preliminary Rate Resolution, and Authorization to Advertise the Preliminary Rate Schedule for a Public Hearing to be held during a meeting of the Board of Directors on May 25, 2021.

FY 2022
PROPOSED BUDGET

Board of Directors Draft
March 23, 2021

RIVANNA
WATER & SEWER AUTHORITY

RIVANNA WATER & SEWER AUTHORITY
FY 2022 Proposed Budget

Prepared: March 8, 2021
Adopted: BOD -Draft 4

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Budget Highlights

- Executive Summary Narrative
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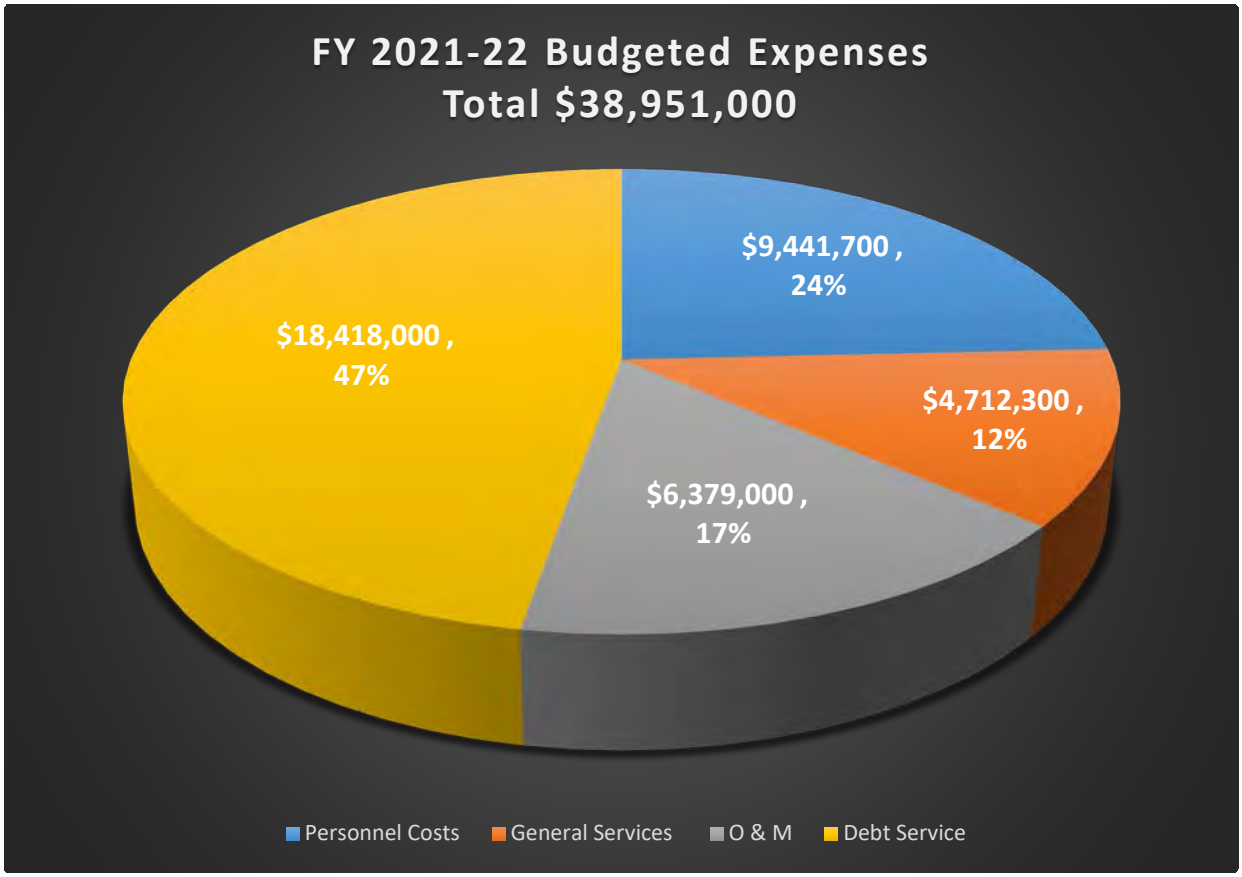
Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget

Budget Overview

The Rivanna Water and Sewer Authority provides wholesale drinking water and wastewater treatment services for the City of Charlottesville and the Albemarle County Service Authority (ACSA). An FY 2021-2022 budget of $38,951,000 is proposed to strategically provide these water and wastewater services in a reliable, regulatory compliant, environmentally protective and financially responsible manner. The FY 2021-2022 budget proposes increases of $1,148,000 in Operating expenses, and $689,000 in scheduled Debt Service charges for our Capital Improvement Program, for a total budget increase of $1,837,000, or 4.95%.

The proposed budget includes $20,533,000 for Operating expenses and $18,418,000 for Debt Service charges. Operating expenses include Personnel costs (staff salaries and benefits), General Services costs (professional and nonprofessional contract services, utilities, insurance, permits, and data/voice communications), and Operation and Maintenance costs (chemicals, building repairs, technology, equipment maintenance, and depreciation). Debt Service charges represent 47% of our budget, and provide funding to construct and renew our major infrastructure including water and wastewater treatment plants, pumping stations, piping systems and reservoir facilities. The proposed budget includes three additional positions and a 2% merit pool for staff salary increases.



Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget

To provide the capacity and reliability needed to appropriately serve our customers through our Strategic Plan goals of Operational Optimization, Workforce Development, Communication and Collaboration, Infrastructure and Master Planning, and Environmental Stewardship, the FY 2021-2022 budget proposes an increase of $1,148,000 in Operating expenses and an increase of $689,000 in Debt Service charges for a total budget increase of $1,837,000, as shown below: Operating rates in the Urban Rate Centers are proposed to increase:

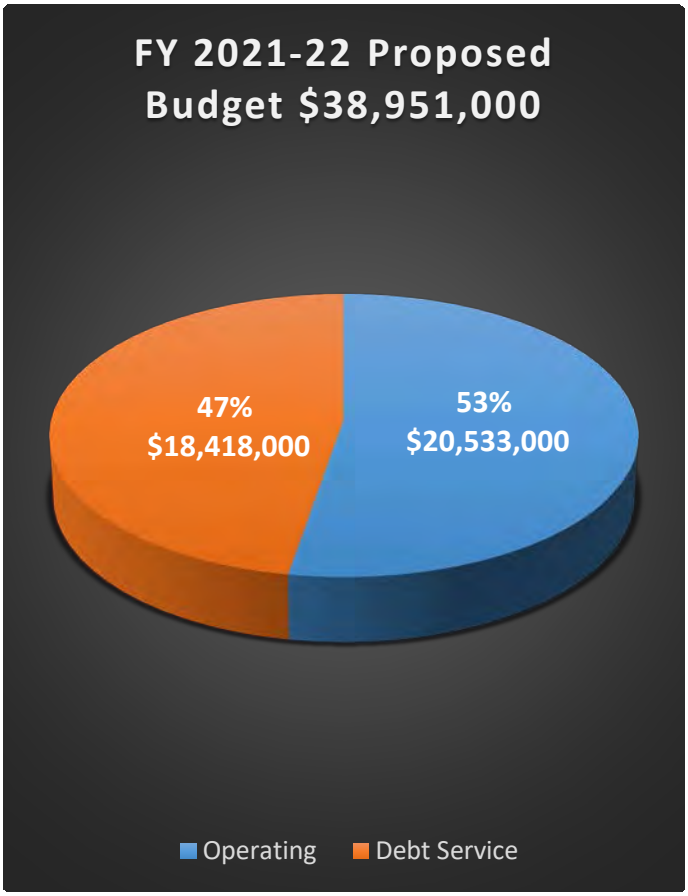
- $0.251 per 1000 gallons = 11.98% for water
- $0.148 per 1000 gallons = 6.25% for wastewater

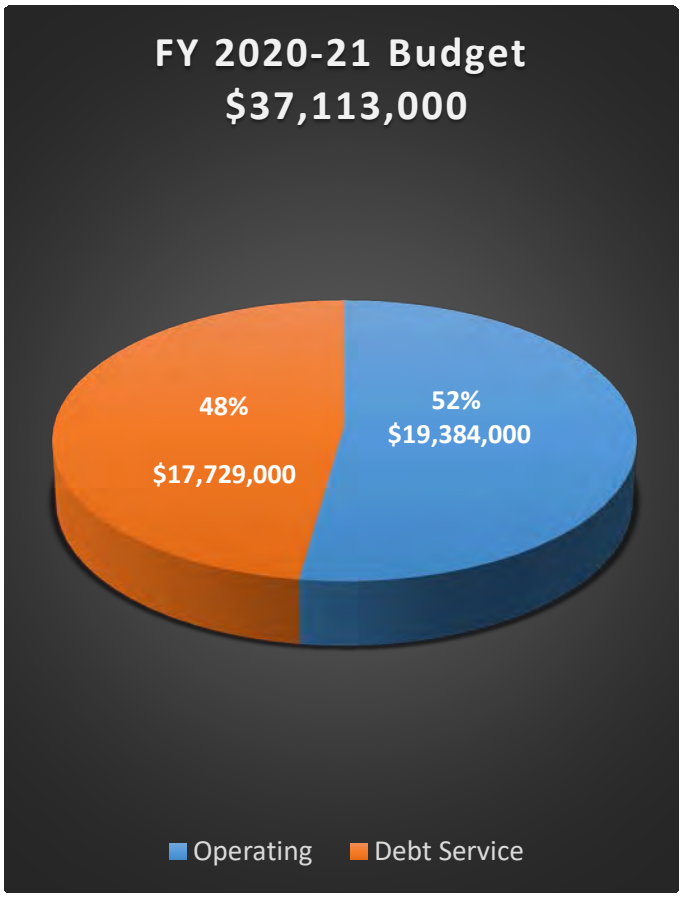
Monthly Debt Service charges to the City will increase:

- $52,608 = 27.18% for Urban water
- $4,611 = 1.13% for Urban wastewater

Monthly Debt Service charges to the ACSA will increase:

- $67,653 = 21.06% for Urban water
- $23,646 = 8.5% for Urban wastewater





Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget

A brief description of proposed budget investments includes:

A. Increase in Operating Expenses: $1,148,000

1. Personnel: $732,400

a. 2% merit + FY 21 mid-year merit $425,900

b. Three Additional Positions $273,000
- Accounting Associate
- IT Administrator
- Facilities Coordinator

c. Health Insurance $33,500

Based on anticipated health care renewal premiums from our insurance provider, Anthem, and anticipated enrollment increases.

2. Water and Wastewater Programs, net increase**: $415,600**

a. Equipment Replacement $260,000
b. Observatory Water Treatment Plant Lease $75,000
c. Buck Mountain Property Management $65,000
d. Buildings and Grounds $15,600

B. Increase in Debt Service Charges: $689,000

These charges will support projects included in the FY 22 – 26 CIP.

Actual Water and Wastewater Flows

Actual FY 2019-2020 water and wastewater retail flows reported by the City and ACSA are used to allocate the Urban Area operating rates and charges, in accordance with the "Working Agreement on Urban area Wholesale Flow Allocation and Billing Methodology" (1983). Based on the actual retail flows reported, the allocation of costs resulted in a $259,700 charge increase for the ACSA and a $259,700 charge decrease for the City.

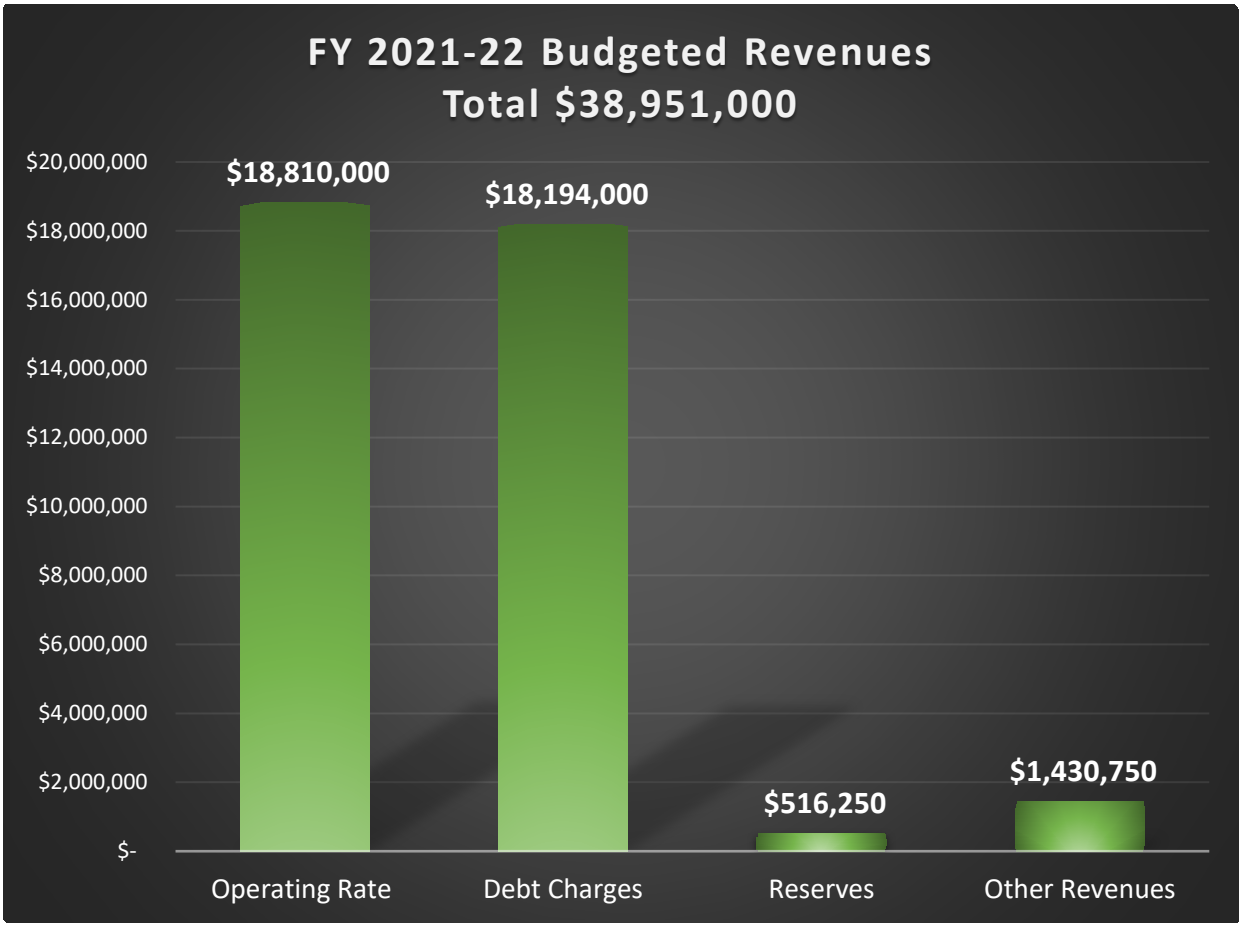
Allocation of flows (based on retail flows):

	FY 2021	FY 2022
City Wastewater	49%	48%
ACSA Wastewater	51%	52%
City Water	51%	49%
ACSA Water	49%	51%

Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget

Revenues & Expenses

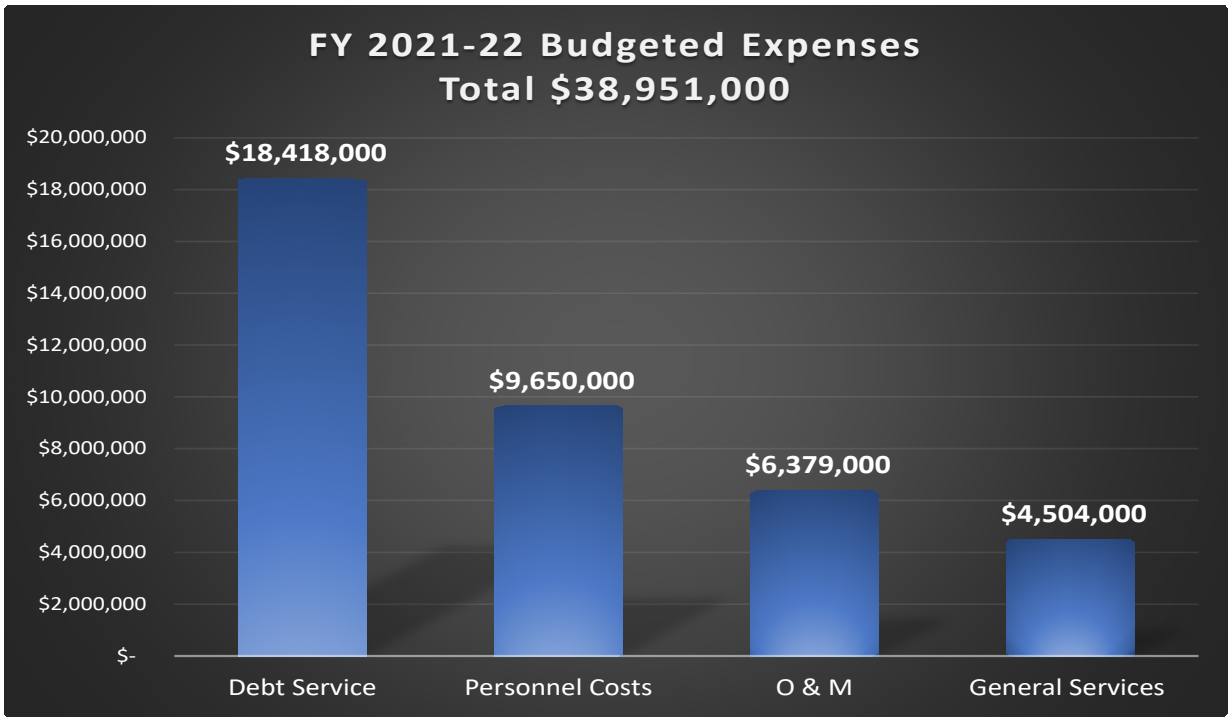
Revenues for FY 2021 - 2022 are based upon estimated Operating Rate revenues of $18,810,000, Debt Service charges of $18,194,000, other non-customer revenues of $1,430,750 (RSWA allocation, septage receiving, nutrient credits, County septage station support, and interest income) and use of reserves of $516,250, as shown below:



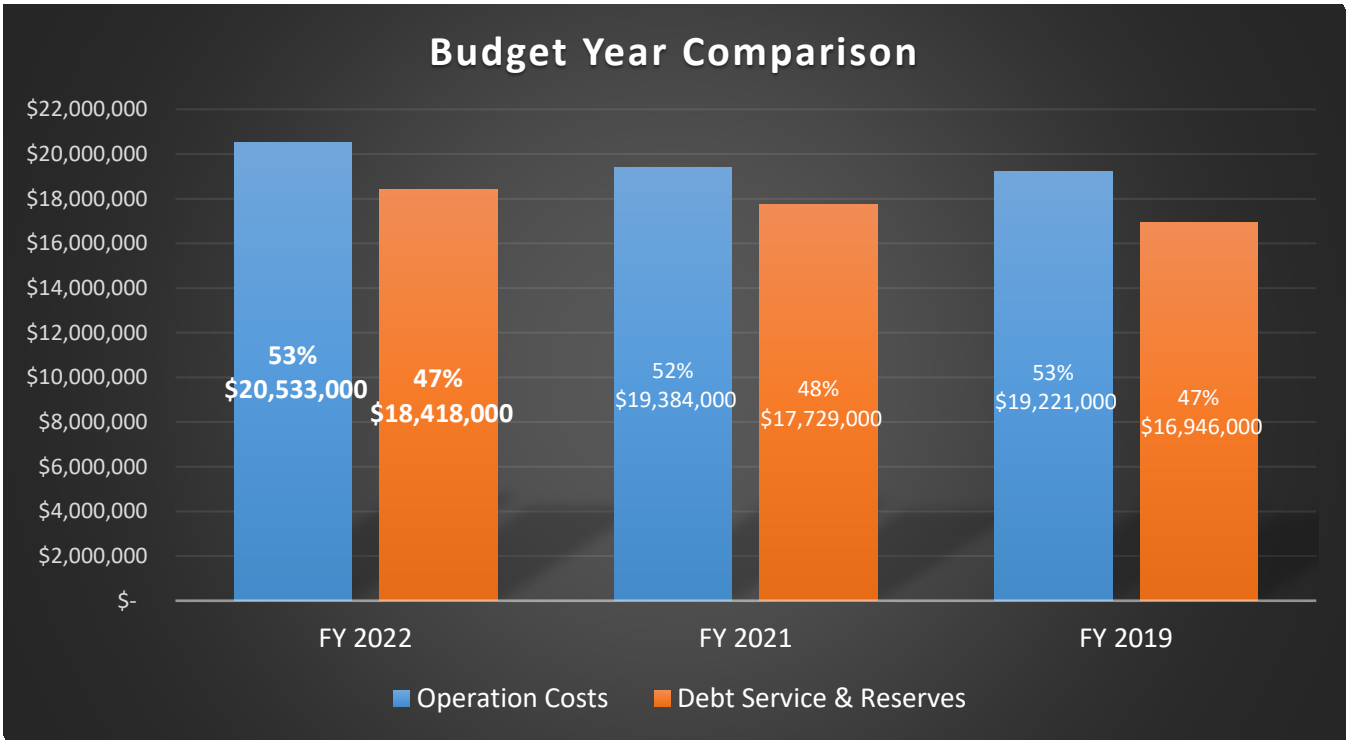
Expenses are largely allocated to four major categories. Debt Service costs of $18,418,000 represent the largest component of our budget. These costs are estimated to increase $689,000 over the FY 2020 – 21 level to support major projects in our CIP including Water Treatment Plant Renovations, Airport Road Water Pump Station, Central Water Line, Crozet Flow Equalization Tank, Ragged Mtn to Observatory Water Line, Beaver Creek Reservoir, and the Rivanna to Ragged Mtn. Reservoir Water Line.

Personnel and Benefit costs are the second largest expense with $9,650,000 in estimated costs. Costs for Operations and Maintenance, which includes chemicals, building repairs, equipment maintenance, IT/SCADA, supplies and materials, and depreciation, will total approximately $6,379,000. General Service costs, which includes professional and nonprofessional contract services, utilities, insurance, permits, and data / voice communications, are anticipated to be $4,504,000, as shown below:

Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget



The Authority's overall ratio of Operating expenses and Debt Service costs is comparable to the last several years, with Operating expenses representing 53% of the total budget and Debt Service costs being 47% of the total budget, as shown below:



Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget

A summary of the major investment changes compared to last year follows, and a detailed line-by-line comparison is provided in **Appendix 8** for the Authority as a whole.

Summary of Budget Expenses **Draft 3**
FY 2022
Significant Line - item increases

	Line Item	Notable Items	Budget Change over Prior year
• Merit of 2.0%	11000	$ 123,700	
Related benefit costs	11XXX	21,400	
Personnel/Position changes:			
3 new positions (Accounting, IT Admin, Facility Coordinator)	11000	195,000	
Benefit costs related to personnel changes	11XXX	78,000	
Health Insurance increases 2.6%		33,500	
All other Personnel related changes (prior year 3% merit)		280,800	
Total change in personnel and benefit costs			**$ 732,400**
General overall changes			
• Professional Services	20300		
Urban Water - Permit Work		$ 25,000	
Urban Water - ARC Flash Consultant		48,500	
Urban Water - Buck Mt. Land Use Consultant		30,000	
Urban Water - Operating & GAC Assistance		85,000	
Urban Water - All other Urban Water		20,700	
Urban Wastewater - Digester evaluation		125,000	
Urban Wastewater - Arch Flash		38,500	
Urban Wastewater - Operating assistance		40,000	
All Other Departments - ARC Flash Labeling		7,000	
All other needs - general operating assistance		99,150	
Total Requested FY2022		**518,850**	
FY 2021 Budget		(379,700)	
		$ 139,150	$ 139,150
Urban Water			
• Watershed Mgt.	21250		
RCA Contribution		$ 15,000	
Stewardship goal team initiatives		2,000	
Mitigation monitoring		30,000	
Mitigation maintenance and repairs		20,000	
Source water protection regional outreach		10,000	
		$ 77,000	
FY 2021 Budget		$ (55,000)	
		$ 22,000	$ 22,000
• Building & Grounds	41100		
Buck Mt. Land Management		65,000	
Painting and tank site mowing		24,400	
Fence clearing, repair and tree removal		70,000	

Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget

		$ 159,400	
FY 2021 Budget		$ (116,800)	
		$ 42,600	$ 42,600
• Lease - Observatory	41150		$ 75,000
Urban Wastewater			
• Chemicals - more efficient use of bioxide, polymer, micro C	41450		$ (171,000)
• Equipment over 10,000:	81250		
Macerator at headworks		24,000	
Replace yard jockey		35,000	
Aeration basin hoists - 6		36,000	
Spare septic receiving pump		12,000	
NRCY pump rebuilds - 2		60,000	
			$ 167,000
All other Dept and Rate Centers			
• Scottsville Wastewater - Fence repair ($10,000)	41100		$ 8,600
• Crozet - New Sonde for reservoir sampling	81250		$ 25,000
• Maintenance - New valve maintenance machine	81250		$ 68,000
• Engineering -Flat file digital scans, City Works Annual Lic.	31200		$ 76,000
• All other changes			$ (35,592)
FY 2022 Total increases in estimated operating expenses			**$ 1,149,175**

Debt Service & Capital Improvements

Debt service needs for the Capital Improvement Plan (CIP) are included in the budget request. The FY 22-26 CIP totals $170.1 M, a net increase of $37.6 M as compared to the FY 21-25 CIP. In FY 2026, 16 projects totaling $31 M transitioned into the five-year CIP. In addition, six projects were added to the five-year CIP totaling $8.9 M, as well as an $11 M budget increase for existing projects. More detailed information on the proposed FY 2022 – 2026 CIP can be found at http://www.rivanna.org/financials-and-procurement/.

The table below shows the changes in estimated project costs reflected in the CIP:

Project Cost	2021-2025 Adopted CIP	Projects Completed	New or Additional Project Costs	2022-2026 Adopted CIP	Change $	Change %
Urban Water Projects	$ 74,977,900	$ (2,285,914)	$ 23,181,014	$ 95,873,000	$ 20,895,100	28%
Urban Wastewater Projects	22,520,000	(2,691,632)	19,896,962	39,725,330	17,205,330	43%
Shared Projects	4,695,000	-	415,000	5,110,000	415,000	8%
Non-Urban Projects	30,316,000	(8,370,000)	7,499,000	29,445,000	(871,000)	-3%
Total Project Cost Estimates	**$ 132,508,900**	**$ (13,347,546)**	**$ 50,991,976**	**$ 170,153,330**	**$ 37,644,430**	22%

Rivanna Water and Sewer Authority
Proposed
FY 2021-2022 Budget

The Authority has programmed into the FY 2021-2022 budget charges that fund the additional debt service anticipated by the proposed CIP. Cumulatively, the Authority has built 37% of future debt service costs into the rates and charges for all rate centers in FY 2021-2022. This is done by using the CIP as a guide for future debt needs, and including an average charge increase over that five-year period. This proactive approach prevents large spikes in charges for any given year in which new debt is actually issued - effectively leveling the impact on charges.

For example, current Urban Water charges have 40% of the needed future debt service revenues already built into the charges to cover the total funding needed for the next five years (an additional $4.997 M in annual debt service is estimated to be needed in the next 5 years, and $2.02 M will already be programmed into the charges with the adoption of the FY 2021-2022 budget). This will require the remaining $2.977 M to be included in the future debt service charge as an annual increase ($2.977 M / 5 = $595,400) over the next five years to fund the Water projects within the CIP.

	Next Five Years		
	Annual Estimated NEW Debt Service related to 5-year CIP New Debt	New Debt Service Cost built into FY 2022 Rates	Percentage of Debt Service in FY 2022 Rates
Urban Water	$ 4,997,000	$ 2,020,000	40.4%
Urban Wastewater	2,085,600	692,500	33.2%
Non-Urban Rate Centers	2,031,000	655,635	32.3%
	$ 9,113,600	$ 3,368,135	37.0%

Proposed FY 2021-2022 Organization Chart

Rivanna Water & Sewer Authority

Organizational Chart

FY 2021-2022 Proposed Budget

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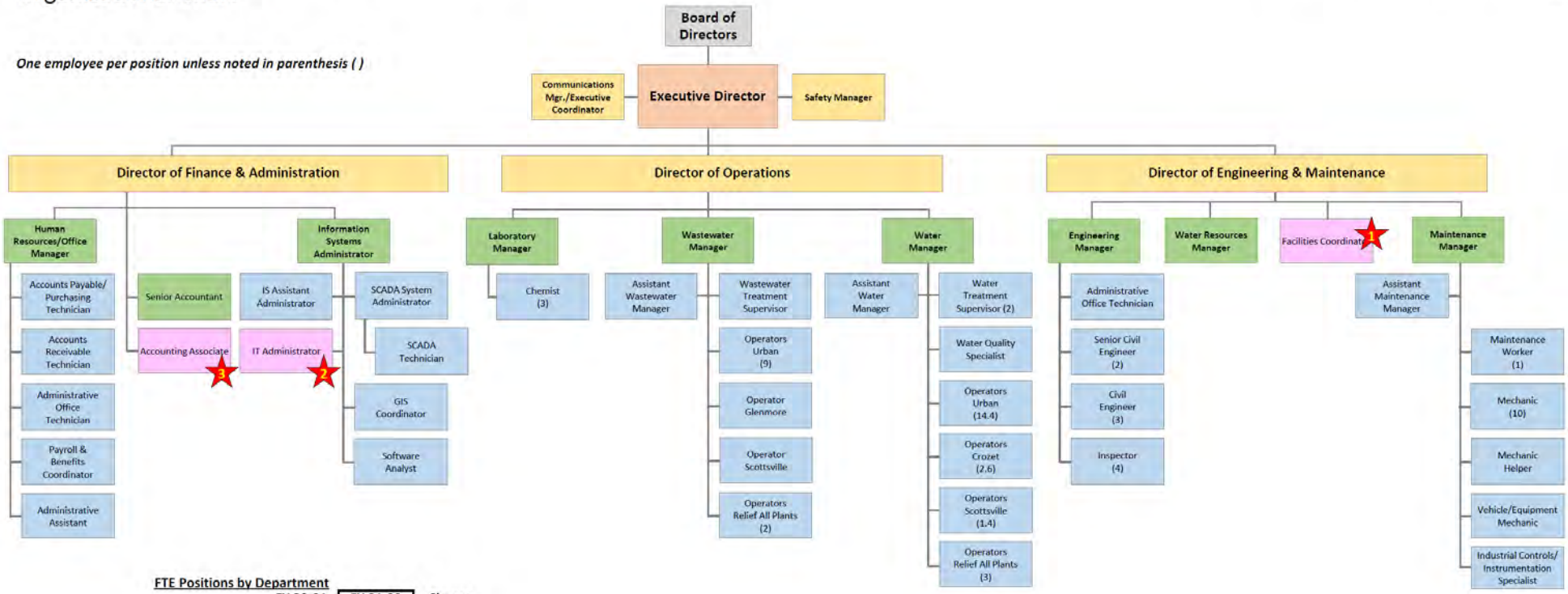
One employee per position unless noted in parenthesis ( )



FTE Positions by Department

Department	FY 20-21 FTE	FY 21-22 FTE	Change + / (-)
Finance/Admin.	11	12	1
IT/SCADA	6	7	1
Engineering	13	14	1
Maintenance	16	16	*No Change*
Operations	1	1	*No Change*
Laboratory	4	4	*No Change*
Wastewater	16	16	*No Change*
Water	26.4	26.4	*No Change*
Total	**93.4**	**96.4**	**3**

FY 2021-2022 FTE Changes

1. *Addition of an Facilities Coordinator (1 FTE) position, increasing the Engineering positions from 13 to 14 FTE.*
2. *Addition of an IT Administrator (1 FTE) position, increasing the IT/SCADA positions from 6 to 7 FTE.*
3. *Addition of an Accounting Associate (1 FTE) position, increasing the Finance/Administration positions from 11 to 12 FTE.*

(FTE = Full Time Equivalent)

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Budget Details

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Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Prepared: March 8, 2021
Adopted: BOD -Draft 4

Departmental Summary of Revenues and Expenses

Summary of Revenues

	FY 2021	FY 2022	$ Change	% Change
Operations Revenues				
Urban Water	$ 7,802,000	$ 8,450,000	648,000	8.31%
Crozet Water	1,087,000	1,102,000	15,000	1.38%
Scottsville Water	531,000	518,000	(13,000)	-2.45%
Urban Wastewater	8,714,000	9,180,000	466,000	5.35%
Glenmore Wastewater	396,000	404,000	8,000	2.02%
Scottsville Wastewater	310,000	326,000	16,000	5.16%
Administration	545,000	553,000	8,000	1.47%
Maintenance	-	-	-	
Lab	-	-	-	
Engineering	-	-	-	
Total	$ 19,384,000	$ 20,533,000	$ 1,148,000	5.93%
Debt Service Revenues				
Urban Water	$ 7,231,000	$ 7,675,000	444,000	6.14%
Crozet Water	1,537,000	1,853,000	316,000	20.56%
Scottsville Water	138,000	140,000	2,000	1.45%
Urban Wastewater	8,802,000	8,732,000	(70,000)	-0.80%
Glenmore Wastewater	7,000	8,000	1,000	14.29%
Scottsville Wastewater	14,000	10,000	(4,000)	-28.57%
Total	$ 17,729,000	$ 18,418,000	$ 689,000	3.89%
Total Revenues	**$ 37,113,000**	**$ 38,951,000**	**$ 1,837,000**	**4.95%**

Summary of Expenses

	FY 2021	FY 2022	$ Change	% Change
Operations Expenses				
Urban Water	$ 5,444,000	$ 5,803,000	359,000	6.59%
Crozet Water	865,000	853,000	(12,000)	-1.39%
Scottsville Water	393,000	362,000	(31,000)	-7.89%
Urban Wastewater	5,908,000	6,014,000	106,000	1.79%
Glenmore Wastewater	289,000	283,000	(6,000)	-2.08%
Scottsville Wastewater	210,000	214,000	4,000	1.90%
Administration	2,492,000	2,736,000	244,000	9.79%
Maintenance	1,536,000	1,785,000	249,000	16.21%
Lab	517,000	544,000	27,000	5.22%
Engineering	1,729,000	1,941,000	212,000	12.26%
Total	$ 19,384,000	$ 20,533,000	$ 1,148,000	5.93%
Debt Service Expenses				
Urban Water	$ 7,231,000	$ 7,675,000	444,000	6.14%
Crozet Water	1,537,000	1,853,000	316,000	20.56%
Scottsville Water	138,000	140,000	2,000	1.45%
Urban Wastewater	8,802,000	8,732,000	(70,000)	-0.80%
Glenmore Wastewater	7,000	8,000	1,000	14.29%
Scottsville Wastewater	14,000	10,000	(4,000)	-28.57%
Total	$ 17,729,000	$ 18,418,000	$ 689,000	3.89%
Total Expenses	**$ 37,113,000**	**$ 38,951,000**	**$ 1,837,000**	**4.95%**
Total Budgetary Surplus/ (Deficit)	**$ -**	**$ -**	**$ -**	

These figures are rounded from the detail pages of this budget model and some immaterial differences will be present.

Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Prepared: **March 8, 2021**
Adopted: **BOD -Draft 4**

Summary of Itemized Rates

URBAN RATE CENTERS			FY 2021	FY 2022	$ Change	% Change
Operating Rates	($ per 1,000 Gallons)					
Operations		**Water**	$ 2.095	$ 2.346	$ 0.251	11.98%
Operations		**Wastewater**	2.369	2.517	0.148	6.25%
Debt Service Charges	($ Monthly Charge)					
Water						
Debt Service		**CITY**	$ 193,580	$ 246,188	$ 52,608	27.18%
Debt Service		**ACSA**	321,303	388,956	67,653	21.06%
Wastewater						
Debt Service		**CITY**	$ 407,588	$ 412,199	$ 4,611	1.13%
Debt Service		**ACSA**	278,174	301,820	23,646	8.50%

OTHER RATE CENTERS (Monthly)	FY 2021	FY 2022	$ Change	% Change
Crozet Water				
Operations	$ 85,734	$ 88,238	$ 2,504	2.92%
Debt Service	109,276	153,986	44,710	40.91%
Scottsville Water				
Operations	$ 43,401	$ 42,892	$ (509)	-1.17%
Debt Service	10,729	11,574	845	7.88%
Water Total	$ 249,140	$ 296,690	$ 47,550	19.09%
Glenmore Wastewater				
Operations	$ 30,877	$ 33,669	$ 2,792	9.04%
Debt Service	315	618	303	96.19%
Scottsville Wastewater				
Operations	$ 25,749	$ 27,189	$ 1,440	5.59%
Debt Service	787	824	37	4.70%
Wastewater Total	$ 57,728	$ 62,300	$ 4,572	7.92%
Total Monthly Other Rate Center Charges - ACSA	**$ 306,868**	**$ 358,990**	**$ 52,122**	**16.99%**

Summary of Charges to Customers

	FY 2021	FY 2022	Change $	Change %
City - Charges From RWSA				
Urban Water				
Operating Rate Charges	$ 3,630,500	$ 3,906,000	$ 275,500	7.6%
Debt Service Charges	2,323,000	2,954,300	631,300	27.2%
	$ 5,953,500	$ 6,860,300	$ 906,800	15.2%
Urban Wastewater				
Operating Rate Charges	$ 3,936,500	$ 4,096,900	$ 160,400	4.1%
Debt Service Charges	4,891,000	4,946,500	55,500	1.1%
	$ 8,827,500	$ 9,043,400	$ 215,900	2.4%
Total City Charges	**$ 14,781,000**	**$ 15,903,700**	**$ 1,122,700**	**7.6%**
ACSA - Charges From RWSA				
Urban Water				
Operating Rate Charges	$ 3,488,100	$ 4,065,500	$ 577,400	16.6%
Debt Service Charges	3,855,600	4,667,500	811,900	21.1%
	$ 7,343,700	$ 8,733,000	$ 1,389,300	18.9%
Urban Wastewater				
Operating Rate Charges	$ 4,097,100	$ 4,438,300	$ 341,200	8.3%
Debt Service Charges	3,338,100	3,621,800	283,700	8.5%
	$ 7,435,200	$ 8,060,100	$ 624,900	8.4%
Other Rate Centers				
Operating Rate Charges	$ 2,229,100	$ 2,303,900	$ 74,800	3.4%
Debt Service Charges	1,453,300	2,004,000	550,700	37.9%
	$ 3,682,400	$ 4,307,900	$ 625,500	17.0%
Total ACSA Charges	**$ 18,461,300**	**$ 21,101,000**	**$ 2,639,700**	**14.3%**
RWSA Customer Revenue Charges				
Operating Rate Revenues				
Urban Water	$ 7,118,600	$ 7,971,500	$ 852,900	12.0%
Urban Wastwater	8,033,600	8,535,200	501,600	6.2%
Other Rate Centers	2,229,100	2,303,900	74,800	3.4%
	$ 17,381,300	$ 18,810,600	$ 1,429,300	8.2%
Debt Service Rate Revenues				
Urban Water	$ 6,178,600	$ 7,621,800	$ 1,443,200	23.4%
Urban Wastewater	8,229,100	8,568,300	339,200	4.1%
Other Rate Centers	1,453,300	2,004,000	550,700	37.9%
	$ 15,861,000	$ 18,194,100	$ 2,333,100	14.7%
Total RWSA Customer Revenues	**$ 33,242,300**	**$ 37,004,700**	**$ 3,762,400**	**11.3%**

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Water Rate Centers

Rivanna Water and Sewer Authority

Fiscal Year 2021-2022

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Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Urban Water Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Projected Flow (MGD)	9.309			9.309	0.00%
Operations Budget					
Projected Revenues					
Operations Rate	**$ 2.095**			**$ 2.346**	11.98%
Revenue	$ 7,118,541	$ 3,731,501	$ 7,463,002	$ 7,971,504	11.98%
Lease Revenues	75,000	41,469	82,938	75,000	0.00%
Use of Reserves (GAC)	500,000	85,600	171,200	300,000	-40.00%
Miscellaneous	-	134,587	134,587	-	
Rate Stabilization Reserves	94,254	47,127	94,254	100,000	6.10%
Interest Allocation	14,600	2,236	4,472	3,400	-76.71%
Total Operations Revenues	**$ 7,802,395**	**$ 4,042,520**	**$ 7,950,453**	**$ 8,449,904**	**8.30%**
Projected Expenses					
Personnel Cost	$ 1,918,361	$ 983,232	$ 1,940,597	$ 2,039,156	6.30%
Professional Services	134,000	157,693	315,386	279,200	108.36%
Other Services and Charges	738,130	447,360	828,631	734,150	-0.54%
Communications	76,000	53,249	102,024	98,670	29.83%
Information Technology	85,500	29,072	82,000	80,500	-5.85%
Supplies	5,745	4,305	8,610	5,100	-11.23%
Operations and Maintenance	2,159,300	1,298,681	2,379,180	2,250,440	4.22%
Equipment Purchases	28,000	11,263	22,526	15,400	-45.00%
Depreciation & Reserves	300,000	150,000	300,000	300,000	0.00%
Subtotal Before Allocations	$ 5,445,036	$ 3,134,855	$ 5,978,954	$ 5,802,616	6.57%
Allocation of Support Departments	2,357,359	1,118,848	2,284,434	2,647,288	12.30%
Total Operations Expenses	**$ 7,802,395**	**$ 4,253,703**	**$ 8,263,388**	**$ 8,449,904**	**8.30%**
Operations Cost per 1,000 gallons	$2.296			$2.487	8.32%
Debt Service Budget					
Projected Revenue					
Debt Service Rates CITY	**193,580**			**246,188**	27.18%
ACSA	**321,303**			**388,956**	21.06%
Debt Service Rate Revenue - CITY	$ 2,323,007	$ 1,161,480	$ 2,322,960	$ 2,954,251	27.17%
Debt Service Rate Revenue - ACSA	3,855,638	1,927,818	3,855,636	4,667,474	21.06%
Trust Fund Interest	49,000	1,716	3,432	12,000	-75.51%
Reserve Fund Interest	339,600	22,032	44,064	39,300	-88.43%
Use of Reserves	662,000	331,000	662,000	-	-100.00%
Lease Revenue	1,600	-	-	1,600	0.00%
Total Debt Service Revenue	**$ 7,230,845**	**$ 3,444,046**	**$ 6,888,092**	**$ 7,674,625**	**6.14%**
Principal, Interest & Reserves					
Total Principal & Interest	$ 5,215,445	$ 2,607,723	$ 5,215,446	$ 5,215,275	0.00%
Reserve Additions - Interest	339,600	22,032	44,064	39,300	-88.43%
Debt Service Ratio Charge	400,000	200,000	400,000	400,000	0.00%
Est. New Debt Service - CIP Growth	1,275,800	637,900	1,275,800	2,020,050	58.34%
Total Debt Principal and Interest	**$ 7,230,845**	**$ 3,467,655**	**$ 6,935,310**	**$ 7,674,625**	**6.14%**
Rate Center Summary					
Total Revenues	$ 15,033,240	$ 7,486,566	$ 14,838,545	$ 16,124,529	7.26%
Total Expenses	15,033,240	7,721,358	15,198,698	16,124,529	7.26%
Surplus/(Deficit)	**$ -**	**$ (234,792)**	**$ (360,153)**	**$ -**	

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Urban Water

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 1,169,750	$ 640,329	$ 1,280,658	$ 1,281,750	$ 112,000	9.57%
11010	Overtime & Holiday Pay	165,000	80,875	145,000	145,000	(20,000)	-12.12%
12010	FICA	102,108	53,770	107,540	109,146	7,038	6.89%
12020	Health Insurance	288,200	115,862	231,724	299,000	10,800	3.75%
12026	Employee Assistance Program	350	188	376	300	(50)	-14.29%
12030	Retirement	105,278	49,929	99,858	106,385	1,107	1.05%
12040	Life Insurance	15,675	7,752	15,504	17,175	1,500	9.57%
12050	Fitness Program	3,700	841	1,682	3,400	(300)	-8.11%
12060	Worker's Comp Insurance	24,600	16,870	22,493	26,100	1,500	6.10%
	Subtotal	$ 1,874,661	$ 966,416	$ 1,904,835	$ 1,988,256	$ 113,595	6.06%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 1,500	$ -	$ 1,500	$ 1,500	$ -	0.00%
13150	Education & Training	15,700	4,642	9,284	22,600	6,900	43.95%
13200	Travel & Lodging	5,000	70	140	5,300	300	6.00%
13250	Uniforms	17,000	11,130	22,260	19,000	2,000	11.76%
13325	Recruiting & Medical Testing	2,000	435	1,500	1,500	(500)	-25.00%
13350	Other	2,500	539	1,078	1,000	(1,500)	-60.00%
	Subtotal	$ 43,700	$ 16,816	$ 35,762	$ 50,900	$ 7,200	16.48%
	Professional Services						
20100	Legal Fees	$ 20,000	$ 23,958	$ 47,916	$ 20,000	$ -	0.00%
20200	Financial & Admin. Services	-	500	1,000	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	114,000	133,235	266,470	259,200	145,200	127.37%
	Subtotal	$ 134,000	$ 157,693	$ 315,386	$ 279,200	$ 145,200	108.36%
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 35,000	$ 21,955	$ 29,273	$ 32,900	$ (2,100)	-6.00%
21150	Advertising & Communication	3,000	-	-	-	(3,000)	
21250	Watershed Management	55,000	101,995	150,000	77,000	22,000	40.00%
21252	EMS Programs/Supplies	1,000	-	-	-	(1,000)	-100.00%
21253	Safety Programs/Supplies	32,130	18,773	37,546	19,600	(12,530)	-39.00%
21300	Authority Dues/Permits/Fees	6,000	1,731	6,000	6,890	890	14.83%
21350	Laboratory Analysis	56,000	20,137	40,274	52,760	(3,240)	-5.79%
21400	Utilities	480,000	257,735	515,470	490,000	10,000	2.08%
21420	General Other Services	70,000	24,454	48,908	55,000	(15,000)	-21.43%
21430	Governance & Strategic Support	-	580	1,160	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	$ 738,130	$ 447,360	$ 828,631	$ 734,150	$ (3,980)	-0.54%
22000	***Communication***						
22100	Radio	$ 5,000	$ 4,537	$ 4,600	$ 3,670	$ (1,330)	-26.60%
22150	Telephone & Data Service	61,000	43,000	86,000	86,000	25,000	40.98%
22200	Cell Phones & Pagers	10,000	5,712	11,424	9,000	(1,000)	-10.00%
	Subtotal	$ 76,000	$ 53,249	$ 102,024	$ 98,670	$ 22,670	29.83%
31000	***Information Technology***						
31100	Computer Hardware	$ 12,000	$ 2,359	$ 12,000	$ 12,000	$ -	0.00%
31150	SCADA Maint. & Support	71,500	26,713	70,000	65,500	(6,000)	-8.39%
31200	Maintenance & Support Services	500	-	-	500	-	0.00%
31250	Software Purchases	1,500	-	-	2,500	1,000	66.67%
	Subtotal	$ 85,500	$ 29,072	$ 82,000	$ 80,500	$ (5,000)	-5.85%
33000	***Supplies***						
33100	Office Supplies	$ 3,500	$ 1,723	$ 3,446	$ 2,700	$ (800)	-22.86%
33150	Subscriptions/Reference Material	-	1,577	3,154	-	-	#DIV/0!
33350	Postage & Delivery	2,245	1,005	2,010	2,400	155	6.90%
	Subtotal	$ 5,745	$ 4,305	$ 8,610	$ 5,100	$ (645)	-11.23%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 116,800	$ 57,209	$ 114,418	$ 159,400	$ 42,600	36.47%
41150	Building & Land Lease	100,000	100,000	100,000	175,000	75,000	75.00%
41200	Pump Station Maintenance	5,000	-	-	-	(5,000)	-100.00%
41300	Dam Maintenance	98,000	39,407	78,814	115,440	17,440	17.80%
41350	Pipeline/Appurtenances	130,000	460,080	600,000	130,000	-	0.00%
41400	Materials, Supplies & Tools	50,000	29,209	58,418	40,000	(10,000)	-20.00%
41450	Chemicals	1,128,800	473,545	1,100,000	1,115,400	(13,400)	-1.19%
41500	Vehicle Maintenance	10,000	2,103	4,206	10,000	-	0.00%
41550	Equipment Repair, Replace, Maint.	250,000	75,466	200,000	250,000	-	0.00%
41600	Instrumentation & Metering	155,700	36,548	73,096	140,200	(15,500)	-9.96%
41650	Fuel & Lubricants	25,000	10,985	21,970	25,000	-	0.00%
41700	General Other Maintenance	90,000	14,129	28,258	90,000	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Urban Water

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
	Subtotal	$ 2,159,300	$ 1,298,681	$ 2,379,180	$ 2,250,440	$ 91,140	4.22%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ 2,263	$ 4,526	$ -	$ -	#DIV/0!
81250	Equipment (over $10,000)	10,000	-	-	-	(10,000)	-100.00%
81300	Vehicle Replacement Fund	18,000	9,000	18,000	15,400	(2,600)	-14.44%
	Subtotal	$ 28,000	$ 11,263	$ 22,526	$ 15,400	$ (12,600)	-45.00%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ 856,542	$ 391,913	$ 835,220	$ 960,343	$ 103,801	12.12%
95300	Engineering Allocation	812,821	376,121	751,233	912,156	99,335	12.22%
95150	Maintenance Allocation	460,727	246,621	488,819	535,418	74,691	16.21%
95200	Laboratory Allocation	227,269	104,193	209,162	239,371	12,102	5.32%
	Subtotal	$ 2,357,359	$ 1,118,848	$ 2,284,434	$ 2,647,288	$ 289,929	12.30%
	Depreciation	$ 300,000	$ 150,000	$ 300,000	$ 300,000	$ -	0.00%
	Subtotal	$ 300,000	$ 150,000	$ 300,000	$ 300,000	$ -	0.00%
	Total	**$ 7,802,395**	**$ 4,253,703**	**$ 8,263,388**	**$ 8,449,904**	**$ 647,509**	**8.30%**

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Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Crozet Water Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Projected Flow (MGD)	0.545			0.555	1.83%
Operations Budget					
Projected Revenues					
Operations Rate (monthly)	**$ 85,734**			**$ 88,238**	2.92%
Revenue	$ 1,028,808	$ 514,404	$ 1,028,808	$ 1,058,856	2.92%
Leases	30,000	14,554	29,108	30,000	0.00%
Use of Reserves	26,000	-	-	13,000	-50.00%
Interest Allocation	2,100	317	634	500	-76.19%
Total Operations Revenues	**$ 1,086,908**	**$ 529,275**	**$ 1,058,550**	**$ 1,102,356**	**1.42%**
Projected Expenses					
Personnel Cost	$ 302,598	$ 156,820	$ 311,792	$ 324,463	7.23%
Professional Services	15,000	12,440	24,880	15,100	0.67%
Other Services and Charges	142,360	44,621	100,097	104,450	-26.63%
Communications	5,600	9,512	18,338	17,530	213.04%
Information Technology	2,250	409	818	5,250	133.33%
Supplies	1,350	1,061	2,122	1,500	11.11%
Operations and Maintenance	353,292	221,308	442,616	296,900	-15.96%
Equipment Purchases	3,000	1,500	3,000	28,000	833.33%
Depreciation	40,000	20,000	40,000	60,000	50.00%
Subtotal Before Allocations	$ 865,450	$ 467,671	$ 943,663	$ 853,193	-1.42%
Allocations of Support Departments	221,455	105,882	215,908	249,160	12.51%
Total Operations Expenses	**$ 1,086,905**	**$ 573,553**	**$ 1,159,571**	**$ 1,102,353**	**1.42%**
Operations Cost per 1,000 gallons	$5.464			$5.442	-0.40%
Debt Service Budget					
Projected Revenue					
Debt Service Rates (monthly)	**$ 109,276**			**$ 153,986**	40.91%
Debt Service Rate Revenue - ACSA	$ 1,311,312	$ 655,656	$ 1,311,312	$ 1,847,832	40.91%
Trust Fund Interest	11,600	404	808	2,900	-75.00%
Use of Reserves	198,252	99,126	198,252	-	
Reserve Fund Interest	15,700	1,037	2,074	2,500	-84.08%
Total Debt Service Revenue	**$ 1,536,864**	**$ 756,223**	**$ 1,512,446**	**$ 1,853,232**	**20.59%**
Principal, Interest & Reserves					
Total Principal & Interest - Existing	$ 1,217,569	$ 608,785	$ 1,217,570	$ 1,216,667	-0.07%
Estimated New Principal & Interest	303,600	1,037	2,074	634,070	108.85%
Reserve Additions - Interest	15,700	151,800	303,600	2,500	-84.08%
Total Debt Principal and Interest	**$ 1,536,869**	**$ 761,622**	**$ 1,523,244**	**$ 1,853,237**	**20.59%**
Rate Center Summary					
Total Revenues	$ 2,623,772	$ 1,285,498	$ 2,570,996	$ 2,955,588	12.65%
Total Expenses	2,623,774	1,335,175	2,682,815	2,955,590	12.65%
Surplus/(Deficit)	**$ (2)**	**$ (49,677)**	**$ (111,819)**	**$ (2)**	
Rates - (Monthly)					
ACSA	**$ 195,010**			**$ 242,224**	**24.21%**

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Crozet Water

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 185,300	$ 101,814	$ 203,628	$ 203,300	$ 18,000	9.71%
11010	Overtime & Holiday Pay	25,000	13,173	26,346	25,000	-	0.00%
12010	FICA	16,088	8,575	17,150	17,465	1,377	8.56%
12020	Health Insurance	46,400	18,429	36,858	48,100	1,700	3.66%
12026	Employee Assistance Program	50	30	60	50	-	0.00%
12030	Retirement	16,677	7,934	15,868	16,874	197	1.18%
12040	Life Insurance	2,483	1,231	2,462	2,724	241	9.71%
12050	Fitness Program	600	128	256	600	-	0.00%
12060	Worker's Comp Insurance	4,000	2,772	3,696	4,100	100	2.50%
	Subtotal	$ 296,598	$ 154,086	$ 306,324	$ 318,213	$ 21,615	7.29%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 200	$ -	$ -	$ 250	$ 50	25.00%
13150	Education & Training	2,000	754	1,508	1,200	(800)	-40.00%
13200	Travel & Lodging	300	11	22	400	100	33.33%
13250	Uniforms	2,600	1,813	3,626	3,700	1,100	42.31%
13325	Recruiting & Medical Testing	300	68	136	200	(100)	-33.33%
13350	Other	600	88	176	500	(100)	-16.67%
	Subtotal	$ 6,000	$ 2,734	$ 5,468	$ 6,250	$ 250	4.17%
	Professional Services						
20100	Legal Fees	$ -	$ -	$ -	$ -	$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	15,000	12,440	24,880	15,100	100	0.67%
	Subtotal	$ 15,000	$ 12,440	$ 24,880	$ 15,100	$ 100	
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 2,500	$ 1,568	$ 2,091	$ 2,200	$ (300)	-12.00%
21150	Advertising & Communication	-	700	1,400		-	
21250	Watershed Management	25,000	-	-	-	(25,000)	-100.00%
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	3,260	1,735	3,470	5,150	1,890	57.98%
21300	Authority Dues/Permits/Fees	1,000	307	614	1,000	-	0.00%
21350	Laboratory Analysis	30,600	6,761	13,522	16,100	(14,500)	-47.39%
21400	Utilities	80,000	33,550	79,000	80,000	-	0.00%
21420	General Other Services	-	-	-	-	-	#DIV/0!
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	$ 142,360	$ 44,621	$ 100,097	$ 104,450	$ (37,910)	-26.63%
22000	***Communication***						
22100	Radio	$ 900	$ 693	$ 700	$ 330	$ (570)	-63.33%
22150	Telephone & Data Service	3,500	8,083	16,166	16,000	12,500	357.14%
22200	Cell Phones & Pagers	1,200	736	1,472	1,200	-	0.00%
	Subtotal	$ 5,600	$ 9,512	$ 18,338	$ 17,530	$ 11,930	213.04%
31000	***Information Technology***						
31100	Computer Hardware	$ 1,250	$ 169	$ 338	$ 2,250	$ 1,000	80.00%
31150	SCADA Maint. & Support	1,000	240	480	3,000	2,000	200.00%
31200	Maintenance & Support Services	-	-	-	-	-	
31250	Software Purchases	-	-	-	-	-	#DIV/0!
	Subtotal	$ 2,250	$ 409	$ 818	$ 5,250	$ 3,000	133.33%
33000	***Supplies***						
33100	Office Supplies	$ -	$ 1	$ 2	$ -	$ -	#DIV/0!
33150	Subscriptions/Reference Material	-	40	80	-	-	#DIV/0!
33350	Postage & Delivery	1,350	1,020	2,040	1,500	150	11.11%
	Subtotal	$ 1,350	$ 1,061	$ 2,122	$ 1,500	$ 150	11.11%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 23,100	$ 11,810	$ 23,620	$ 18,200	$ (4,900)	-21.21%
41150	Building & Land Lease	-	69	138	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	2,500	-	-	-	(2,500)	-100.00%
41350	Pipeline/Appurtenances	5,000	-	-	5,000	-	0.00%
41400	Materials, Supplies & Tools	2,500	6,025	12,050	2,500	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Crozet Water

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41450	Chemicals	225,500	141,709	283,418	204,400	(21,100)	-9.36%
41500	Vehicle Maintenance	1,500	161	322	1,500	-	0.00%
41550	Equipment Repair, Replace, Maint.	40,000	21,467	42,934	40,000	-	0.00%
41600	Instrumentation & Metering	12,700	383	766	11,500	(1,200)	-9.45%
41650	Fuel & Lubricants	7,000	2,284	4,568	5,000	(2,000)	-28.57%
41700	General Other Maintenance	33,492	37,400	74,800	8,800	(24,692)	-73.73%
	Subtotal	$ 353,292	$ 221,308	$ 442,616	$ 296,900	$ (56,392)	-15.96%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ -	$ -	$ -	$ -	
81250	Equipment (over $10,000)	-	-	-	25,000	25,000	
81300	Vehicle Replacement Fund	3,000	1,500	3,000	3,000	-	0.00%
	Subtotal	$ 3,000	$ 1,500	$ 3,000	$ 28,000	$ 25,000	833.33%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ 77,867	$ 35,628	$ 75,929	$ 87,304	$ 9,437	12.12%
95300	Engineering Allocation	69,176	32,010	63,935	77,630	8,454	12.22%
95150	Maintenance Allocation	53,751	28,772	57,029	62,465	8,714	16.21%
95200	Laboratory Allocation	20,661	9,472	19,015	21,761	1,100	5.32%
	Subtotal	$ 221,455	$ 105,882	$ 215,908	$ 249,160	$ 27,705	12.51%
	Depreciation	$ 40,000	$ 20,000	$ 40,000	$ 60,000	$ 20,000	50.00%
	Subtotal	$ 40,000	$ 20,000	$ 40,000	$ 60,000	$ 20,000	50.00%
	Total	**$ 1,086,905**	**$ 573,553**	**$ 1,159,571**	**$ 1,102,353**	**$ 15,448**	**1.42%**

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Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Scottsville Water Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Projected Flow (MGD)	0.047			0.047	0.00%
Operations Budget					
Projected Revenues					
Operations Rate (monthly)	**$ 43,401**			**$ 42,892**	-1.17%
Revenue	$ 520,812	$ 260,406	$ 520,812	$ 514,704	-1.17%
Use of reserves	9,220	-	-	3,250	-64.75%
Interest Allocation	1,000	156	312	200	-80.00%
Total Operations Revenues	**$ 531,032**	**$ 260,562**	**$ 521,124**	**$ 518,154**	**-2.43%**
Projected Expenses					
Personnel Cost	$ 184,032	$ 95,693	$ 190,210	$ 195,695	6.34%
Professional Services	71,000	2,026	70,000	2,900	-95.92%
Other Services and Charges	22,780	13,273	26,169	28,100	23.35%
Communications	4,600	3,063	6,126	4,930	7.17%
Information Technology	650	844	1,688	1,250	92.31%
Supplies	200	-	-	770	285.00%
Operations and Maintenance	87,662	30,070	75,328	87,200	-0.53%
Equipment Purchases	2,500	1,250	2,500	1,500	-40.00%
Depreciation	20,000	10,000	20,000	40,000	100.00%
Subtotal Before Allocations	$ 393,424	$ 156,219	$ 392,021	$ 362,345	-7.90%
Allocations of Support Departments	137,603	67,327	136,468	155,813	13.23%
Total Operations Expenses	**$ 531,027**	**$ 223,546**	**$ 528,489**	**$ 518,158**	**-2.42%**
Operations Cost per 1,000 gallons	$30.955			$30.204	-2.43%
Debt Service Budget					
Projected Revenue					
Debt Service Rates - Monthly	**$ 10,729**			**$ 11,574**	7.88%
Debt Service Rate Revenue - ACSA	$ 128,749	$ 64,374	$ 128,748	$ 138,888	7.88%
Trust Fund Interest	1,200	43	86	300	-75.00%
Reserve Fund Interest	8,300	518	1,036	1,200	-85.54%
Total Debt Service Revenue	**$ 138,249**	**$ 64,935**	**$ 129,870**	**$ 140,388**	**1.55%**
Principal, Interest & Reserves					
Total Principal & Interest	$ 126,032	$ 63,016	$ 126,032	$ 125,892	-0.11%
Estimated New Principal & Interest	3,917	1,959	3,918	13,299	239.52%
Reserve Additions-Interest	8,300	518	1,036	1,200	-85.54%
Total Debt Principal and Interest	**$ 138,249**	**$ 65,493**	**$ 130,986**	**$ 140,391**	**1.55%**

Rate Center Summary					
Total Revenues	$ 669,281	$ 325,497	$ 650,994	$ 658,542	-1.60%
Total Expenses	669,276	289,039	659,475	658,549	-1.60%
Surplus/ (Deficit)	**$ 5**	**$ 36,458**	**$ (8,481)**	**$ (7)**	
Rates - Monthly					
ACSA	**$ 54,130**			**$ 54,466**	**0.62%**

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Scottsville Water

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 113,850	$ 62,046	$ 124,092	$ 124,900	$ 11,050	9.71%
11010	Overtime & Holiday Pay	13,000	8,067	16,134	13,000	-	0.00%
12010	FICA	9,704	5,229	10,458	10,549	845	8.71%
12020	Health Insurance	28,600	11,232	22,464	29,700	1,100	3.85%
12026	Employee Assistance Program	25	19	38	25	-	0.00%
12030	Retirement	10,247	4,835	9,670	10,367	120	1.17%
12040	Life Insurance	1,526	750	1,500	1,674	148	9.70%
12050	Fitness Program	300	77	154	350	50	16.67%
12060	Worker's Comp Insurance	2,600	1,764	2,352	2,500	(100)	-3.85%
	Subtotal	$ 179,852	$ 94,019	$ 186,862	$ 193,065	$ 13,213	7.35%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 180	$ -	$ -	$ 180	$ -	0.00%
13150	Education & Training	1,950	462	924	400	(1,550)	-79.49%
13200	Travel & Lodging	200	7	14	200	-	0.00%
13250	Uniforms	1,400	1,110	2,220	1,400	-	0.00%
13325	Recruiting & Medical Testing	150	41	82	150	-	0.00%
13350	Other	300	54	108	300	-	0.00%
	Subtotal	$ 4,180	$ 1,674	$ 3,348	$ 2,630	$ (1,550)	-37.08%
	Professional Services						
20100	Legal Fees	$ -	$ -	$ -		$ -	
20200	Financial & Admin. Services	-	-	-		-	
20250	Bond Issue Costs	-	-	-		-	
20300	Engineering & Technical Services	71,000	2,026	70,000	2,900	(68,100)	-95.92%
	Subtotal	$ 71,000	$ 2,026	$ 70,000	$ 2,900	$ (68,100)	
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 900	$ 565	$ 753	$ 900	$ -	0.00%
21150	Advertising & Communication	-	400	800		-	
21250	Watershed Management	-	-	-		-	
21252	EMS Programs/Supplies	-	-	-		-	
21253	Safety Programs/Supplies	1,430	1,736	3,472	5,900	4,470	312.59%
21300	Authority Dues/Permits/Fees	500	-	-	500	-	0.00%
21350	Laboratory Analysis	4,850	4,038	8,076	5,800	950	19.59%
21400	Utilities	15,000	6,534	13,068	15,000	-	0.00%
21420	General Other Services	100	-	-	-	(100)	-100.00%
21430	Governance & Strategic Support	-	-	-		-	
21450	Bad Debt	-	-	-		-	
	Subtotal	$ 22,780	$ 13,273	$ 26,169	$ 28,100	$ 5,320	23.35%
22000	***Communication***						
22100	Radio	$ 500	$ 413	$ 826	$ 330	$ (170)	-34.00%
22150	Telephone & Data Service	3,200	2,118	4,236	3,700	500	15.63%
22200	Cell Phones & Pagers	900	532	1,064	900	-	0.00%
	Subtotal	$ 4,600	$ 3,063	$ 6,126	$ 4,930	$ 330	7.17%
31000	***Information Technology***						
31100	Computer Hardware	$ 150	$ -	$ -	$ 750	$ 600	400.00%
31150	SCADA Maint. & Support	500	844	1,688	500	-	0.00%
31200	Maintenance & Support Services	-	-	-		-	
31250	Software Purchases	-	-	-		-	0.00%
	Subtotal	$ 650	$ 844	$ 1,688	$ 1,250	$ 600	92.31%
33000	***Supplies***						
33100	Office Supplies	$ -	$ -	$ -		$ -	#DIV/0!
33150	Subscriptions/Reference Material	-	-	-		-	#DIV/0!
33350	Postage & Delivery	200	-	-	770	570	285.00%
	Subtotal	$ 200	$ -	$ -	$ 770	$ 570	285.00%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 5,700	$ 6,548	$ 13,096	$ 5,900	$ 200	3.51%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	1,500	-	-	-	(1,500)	-100.00%
41350	Pipeline/Appurtenances	-	-	-	-	-	
41400	Materials, Supplies & Tools	3,000	803	1,606	3,700	700	23.33%
41450	Chemicals	35,550	9,769	19,538	32,800	(2,750)	-7.74%
41500	Vehicle Maintenance	800	98	196	800	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Scottsville Water

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41550	Equipment Repair, Replace, Maint.	20,000	7,406	20,000	20,000	-	0.00%
41600	Instrumentation & Metering	10,600	-	10,000	13,200	2,600	24.53%
41650	Fuel & Lubricants	1,000	346	692	1,000	-	0.00%
41700	General Other Maintenance	9,512	5,100	10,200	9,800	288	3.03%
	Subtotal	$ 87,662	$ 30,070	$ 75,328	$ 87,200	$ (462)	-0.53%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ -	$ -		-	#DIV/0!
81250	Equipment (over $10,000)	-	-	-		-	
81300	Vehicle Replacement Fund	2,500	1,250	2,500	1,500	(1,000)	-40.00%
	Subtotal	$ 2,500	$ 1,250	$ 2,500	$ 1,500	$ (1,000)	-40.00%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ 38,934	$ 17,814	$ 37,965	$ 43,652	$ 4,718	12.12%
95300	Engineering Allocation	34,588	16,005	31,967	38,815	4,227	12.22%
95150	Maintenance Allocation	53,751	28,772	57,029	62,465	8,714	16.21%
95200	Laboratory Allocation	10,330	4,736	9,507	10,881	551	5.33%
	Subtotal	$ 137,603	$ 67,327	$ 136,468	$ 155,813	$ 18,210	13.23%
	Depreciation	$ 20,000	$ 10,000	$ 20,000	$ 40,000	$ 20,000	100.00%
	Subtotal	$ 20,000	$ 10,000	$ 20,000	$ 40,000	$ 20,000	100.00%
	Total	**$ 531,027**	**$ 223,546**	**$ 528,489**	**$ 518,158**	**$ (12,869)**	**-2.42%**

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Wastewater Rate Centers

Rivanna Water and Sewer Authority

Fiscal Year 2021-2022

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Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Urban Wastewater Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Projected Flow (MGD)	9.289			9.289	0.00%
Operations Budget					
Projected Revenues					
Operations Rate	**$ 2.369**			**$ 2.517**	6.25%
Revenue	$ 8,033,620	$ 4,701,231	$ 9,152,462	$ 8,535,195	6.24%
Stone Robinson WWTP	22,788	7,344	14,688	20,589	-9.65%
Septage Acceptance	475,000	260,291	520,582	475,000	0.00%
Nutrient Credits	45,000	86,999	173,998	45,000	0.00%
Rate Stabilization Reserve	121,233	60,617	121,234	100,000	-17.51%
Miscellaneous Revenue	-	2,224	4,448	-	
Interest Allocation	16,100	2,467	4,934	3,800	-76.40%
Total Operations Revenues	**$ 8,713,741**	**$ 5,121,173**	**$ 9,992,346**	**$ 9,179,584**	**5.35%**
Projected Expenses					
Personnel Cost	$ 1,299,876	$ 624,033	$ 1,242,974	$ 1,289,471	-0.80%
Professional Services	143,400	90,080	180,160	208,500	45.40%
Other Services and Charges	2,020,300	1,107,698	2,187,209	2,011,700	-0.43%
Communications	10,700	7,972	15,944	9,800	-8.41%
Information Technology	69,500	11,104	54,772	56,500	-18.71%
Supplies	1,900	1,219	2,438	1,200	-36.84%
Operations and Maintenance	1,767,000	863,357	1,851,714	1,672,520	-5.35%
Equipment Purchases	125,250	40,738	81,476	294,250	134.93%
Depreciation & Reserves	470,000	235,000	470,000	470,000	0.00%
Subtotal before allocations	$ 5,907,926	$ 2,981,201	$ 6,086,687	$ 6,013,941	1.79%
Allocations of Support Departments	2,805,815	1,355,422	2,758,464	3,165,643	12.82%
Total Operations Expenses	**$ 8,713,741**	**$ 4,336,623**	**$ 8,845,151**	**$ 9,179,584**	**5.35%**
Operations Cost per 1,000 gallons	$2.570			$2.707	5.33%
Debt Service Budget					
Projected Revenue					
Debt Service Rate CITY	**407,588**			**412,199**	**1.13%**
ACSA	**278,174**			**301,820**	**8.50%**
Debt Service Rate Revenue - CITY	$ 4,891,018	$ 2,445,528	$ 4,891,056	$ 4,946,384	1.13%
Debt Service Rate Revenue - ACSA	3,338,072	1,669,044	3,338,088	3,621,837	8.50%
County MOU - Septage	109,440	109,441	218,882	109,440	0.00%
Trust Fund Interest	74,000	2,586	5,172	18,500	-75.00%
Use of Reserves	94,400	47,200	94,400	-	-100.00%
Reserve Fund Interest	295,200	19,138	38,276	36,300	-87.70%
Total Debt Service Revenue	**$ 8,802,130**	**$ 4,292,937**	**$ 8,585,874**	**$ 8,732,461**	-0.79%
Principal, Interest & Reserves					
Total Principal & Interest	$ 7,812,130	$ 3,906,065	$ 7,812,130	$ 7,689,212	-1.57%
Reserve Additions - Interest	295,200	19,138	38,276	36,300	-87.70%
Debt Service Ratio Charge	325,000	162,500	325,000	325,000	0.00%
Est. New Debt Service - CIP Growth	369,800	184,900	369,800	681,950	84.41%
Total Debt Principal and Interest	**$ 8,802,130**	**$ 4,272,603**	**$ 8,545,206**	**$ 8,732,462**	-0.79%
Rate Center Summary					
Total Revenues	$ 17,515,871	$ 9,414,110	$ 18,578,220	$ 17,912,045	2.26%
Total Expenses	17,515,871	8,609,226	17,390,357	17,912,046	2.26%
Surplus/(Deficit)	**$ -**	**$ 804,884**	**$ 1,187,863**	**$ (1)**	

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Urban Wastewater

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 844,100	$ 410,469	$ 820,938	$ 847,100	$ 3,000	0.36%
11010	Overtime & Holiday Pay	65,000	26,884	53,768	55,000	(10,000)	-15.38%
12010	FICA	69,546	32,440	64,880	69,011	(535)	-0.77%
12020	Health Insurance	193,100	90,543	181,086	200,300	7,200	3.73%
12026	Employee Assistance Program	250	118	236	200	(50)	-20.00%
12030	Retirement	75,969	30,738	61,476	70,309	(5,660)	-7.45%
12040	Life Insurance	11,311	4,811	9,622	11,351	40	0.35%
12050	Fitness Program	1,000	489	978	1,200	200	20.00%
12060	Worker's Comp Insurance	11,500	7,638	10,184	10,000	(1,500)	-13.04%
	Subtotal	$ 1,271,776	$ 604,130	$ 1,203,168	$ 1,264,471	$ (7,305)	-0.57%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 2,000	$ 1,638	$ 3,276	$ 2,000	$ -	0.00%
13150	Education & Training	10,900	12,657	25,314	7,400	(3,500)	-32.11%
13200	Travel & Lodging	2,500	-	-	2,600	100	4.00%
13250	Uniforms	9,700	5,156	10,312	11,000	1,300	13.40%
13325	Recruiting & Medical Testing	1,000	344	688	1,000	-	0.00%
13350	Other	2,000	108	216	1,000	(1,000)	-50.00%
	Subtotal	$ 28,100	$ 19,903	$ 39,806	$ 25,000	$ (3,100)	-11.03%
	Professional Services						
20100	Legal Fees	$ 5,000	$ -	$ -	$ 5,000	$ -	
20200	Financial & Admin. Services	-	10,688	21,376	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	138,400	79,392	158,784	203,500	65,100	47.04%
	Subtotal	$ 143,400	$ 90,080	$ 180,160	$ 208,500	$ 65,100	
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 67,400	$ 42,280	$ 56,373	$ 66,200	$ (1,200)	-1.78%
21150	Advertising & Communication	-	-	-	-	-	
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	1,000	-	-	-	(1,000)	
21253	Safety Programs/Supplies	25,500	20,518	41,036	10,000	(15,500)	-60.78%
21300	Authority Dues/Permits/Fees	44,900	21,655	43,310	46,500	1,600	3.56%
21350	Laboratory Analysis	9,500	12,632	25,264	25,200	15,700	165.26%
21400	Utilities	940,000	489,702	979,404	940,000	-	0.00%
21420	General Other Services	932,000	520,911	1,041,822	923,800	(8,200)	-0.88%
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	$ 2,020,300	$ 1,107,698	$ 2,187,209	$ 2,011,700	$ (8,600)	-0.43%
22000	***Communication***						
22100	Radio	$ 3,900	$ 3,712	$ 7,424	$ 3,000	$ (900)	-23.08%
22150	Telephone & Data Service	2,000	1,292	2,584	2,000	-	0.00%
22200	Cell Phones & Pagers	4,800	2,968	5,936	4,800	-	0.00%
	Subtotal	$ 10,700	$ 7,972	$ 15,944	$ 9,800	$ (900)	-8.41%
31000	***Information Technology***						
31100	Computer Hardware	$ 9,000	$ 886	$ 1,772	$ 7,000	$ (2,000)	-22.22%
31150	SCADA Maint. & Support	57,500	10,218	50,000	48,500	(9,000)	-15.65%
31200	Maintenance & Support Services	-	-	-	-	-	
31250	Software Purchases	3,000	-	3,000	1,000	(2,000)	-66.67%
	Subtotal	$ 69,500	$ 11,104	$ 54,772	$ 56,500	$ (13,000)	-18.71%
33000	***Supplies***						
33100	Office Supplies	$ 1,000	$ 952	$ 1,904	$ 1,000	$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	
33350	Postage & Delivery	900	267	534	200	(700)	-77.78%
	Subtotal	$ 1,900	$ 1,219	$ 2,438	$ 1,200	$ (700)	-36.84%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 85,000	$ 55,720	$ 111,440	$ 91,160	$ 6,160	7.25%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	90,000	66,461	132,922	-	(90,000)	-100.00%
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	114,360	6,351	12,702	114,360	-	0.00%
41400	Materials, Supplies & Tools	41,000	23,883	47,766	41,000	-	0.00%
41450	Chemicals	848,000	341,038	682,076	677,000	(171,000)	-20.17%
41500	Vehicle Maintenance	15,000	11,070	22,140	15,000	-	0.00%
41550	Equipment Repair, Replace, Maint.	350,000	305,130	610,260	440,000	90,000	25.71%
41600	Instrumentation & Metering	216,640	32,474	189,948	249,000	32,360	14.94%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Urban Wastewater

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41650	Fuel & Lubricants	35,000	12,452	24,904	30,000	(5,000)	-14.29%
41700	General Other Maintenance	(28,000)	8,778	17,556	15,000	43,000	153.57%
	Subtotal	$ 1,767,000	$ 863,357	$ 1,851,714	$ 1,672,520	$ (94,480)	-5.35%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ 77,250	$ 16,738	$ 33,476	$ 77,250	$ -	0.00%
81250	Equipment (over $10,000)	-	-	-	167,000	167,000	
81300	Vehicle Replacement Fund	48,000	24,000	48,000	50,000	2,000	4.17%
	Subtotal	$ 125,250	$ 40,738	$ 81,476	$ 294,250	$ 169,000	134.93%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ 934,409	$ 427,541	$ 911,149	$ 1,047,647	$ 113,238	12.12%
95300	Engineering Allocation	760,939	352,114	703,282	853,934	92,995	12.22%
95150	Maintenance Allocation	867,702	464,470	920,610	1,008,370	140,668	16.21%
95200	Laboratory Allocation	242,765	111,297	223,423	255,692	12,927	5.32%
	Subtotal	$ 2,805,815	$ 1,355,422	$ 2,758,464	$ 3,165,643	$ 359,828	12.82%
	Depreciation	$ 470,000	$ 235,000	$ 470,000	$ 470,000	$ -	0.00%
	Subtotal	$ 470,000	$ 235,000	$ 470,000	$ 470,000	$ -	0.00%
	Total	**$ 8,713,741**	**$ 4,336,623**	**$ 8,845,151**	**$ 9,179,584**	**$ 465,843**	**5.35%**

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Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Glenmore Wastewater Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Projected Flow (MGD)	0.114			0.113	
Operations Budget					
Projected Revenues					
Operations Rate (monthly)	**$ 30,877**			**$ 33,669**	9.04%
Revenue	370,524	$ 185,262	$ 370,524	404,028	9.04%
Rate Stabilizaton	24,540	12,270	24,540	-	
Interest Allocation	700	108	216	200	-71.43%
Total Operations Revenues	**$ 395,764**	**$ 197,640**	**$ 395,280**	**$ 404,228**	**2.14%**
Projected Expenses					
Personnel Cost	$ 97,804	$ 45,247	$ 90,137	$ 94,885	-2.98%
Professional Services	24,200	87	174	12,900	
Other Services and Charges	36,800	17,145	34,207	34,300	-6.79%
Communications	3,200	1,960	3,920	3,130	-2.19%
Information Technology	4,050	915	1,830	2,000	-50.62%
Supplies	-	358	716	-	
Operations and Maintenance	109,100	73,172	146,344	121,650	11.50%
Equipment Purchases	3,700	1,850	3,700	3,800	2.70%
Depreciation	10,000	5,000	10,000	10,000	0.00%
Subtotal before allocations	$ 288,854	$ 145,734	$ 291,028	$ 282,665	-2.14%
Allocations of Support Departments	106,907	53,235	107,118	121,562	13.71%
Total Operations Expenses	**$ 395,761**	**$ 198,969**	**$ 398,146**	**$ 404,227**	**2.14%**
Operations Cost per 1,000 gallons	$9.511			$9.801	
Debt Service Budget					
Projected Revenue					
Debt Service Rate (monthly)	**$ 315**			**$ 618**	96.19%
Debt Service Rate Revenue - ACSA	$ 3,778	$ 1,890	$ 3,780	$ 7,412	96.19%
Trust Fund Interest	-	-	-	-	
Reserve Fund Interest	3,000	216	432	200	-93.33%
Total Debt Service Revenue	**$ 6,778**	**$ 2,106**	**$ 4,212**	**$ 7,612**	**12.30%**
Principal, Interest & Reserves					
Total Principal & Interest	$ 1,579	$ 790	$ 1,580	$ 1,578	-0.06%
Estimated New Principal & Interest	2,199	1,100	2,200	5,834	165.30%
Reserve Additions - Interest	3,000	216	432	200	-93.33%
Total Debt Principal and Interest	**$ 6,778**	**$ 2,106**	**$ 4,212**	**$ 7,612**	**12.30%**

Rate Center Summary					
Total Revenues	$ 402,542	$ 199,746	$ 399,492	$ 411,840	2.31%
Total Expenses	402,539	201,075	402,358	411,839	2.31%
Surplus/(Deficit)	**$ 3**	**$ (1,329)**	**$ (2,866)**	**$ 1**	
Rates (Monthly)					
ACSA	**$ 31,192**			**$ 34,287**	**9.92%**

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Glenmore Wastewater

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 62,100	$ 30,210	$ 60,420	$ 62,200	$ 100	0.16%
11010	Overtime & Holiday Pay	6,500	2,062	4,124	4,000	(2,500)	-38.46%
12010	FICA	5,248	2,394	4,788	5,064	(184)	-3.51%
12020	Health Insurance	14,550	6,718	13,436	15,100	550	3.78%
12026	Employee Assistance Program	15	9	18	15	-	0.00%
12030	Retirement	5,589	2,256	4,512	5,163	(426)	-7.62%
12040	Life Insurance	832	353	706	833	1	0.12%
12050	Fitness Program	70	33	66	80	10	14.29%
12060	Worker's Comp Insurance	800	535	713	800	-	0.00%
	Subtotal	$ 95,704	$ 44,570	$ 88,783	$ 93,255	$ (2,449)	-2.56%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 200	$ 29	$ 58	$ 100	$ (100)	-50.00%
13150	Education & Training	700	220	440	500	(200)	-28.57%
13200	Travel & Lodging	200	-	-	50	(150)	-75.00%
13250	Uniforms	750	395	790	780	30	4.00%
13325	Recruiting & Medical Testing	100	25	50	100	-	0.00%
13350	Other	150	8	16	100	(50)	-33.33%
	Subtotal	$ 2,100	$ 677	$ 1,354	$ 1,630	$ (470)	-22.38%
	Professional Services						
20100	Legal Fees	$ -	$ -	$ -		$ -	
20200	Financial & Admin. Services	-	-	-		-	
20250	Bond Issue Costs	-	-	-		-	
20300	Engineering & Technical Services	24,200	87	174	12,900	(11,300)	-46.69%
	Subtotal	$ 24,200	$ 87	$ 174	$ 12,900	$ (11,300)	
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 200	$ 125	$ 167	$ 300	$ 100	50.00%
21150	Advertising & Communication	-	400	800		-	
21250	Watershed Management	-	-	-		-	
21252	EMS Programs/Supplies	-	-	-		-	
21253	Safety Programs/Supplies	1,100	1,354	2,708	600	(500)	-45.45%
21300	Authority Dues/Permits/Fees	3,000	3,190	6,380	3,400	400	13.33%
21350	Laboratory Analysis	1,500	1,602	3,204	2,000	500	33.33%
21400	Utilities	31,000	10,474	20,948	28,000	(3,000)	-9.68%
21420	General Other Services	-	-	-	-	-	#DIV/0!
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	$ 36,800	$ 17,145	$ 34,207	$ 34,300	$ (2,500)	-6.79%
22000	***Communication***						
22100	Radio	$ 400	$ 413	$ 826	$ 330	$ (70)	-17.50%
22150	Telephone & Data Service	2,200	1,145	2,290	2,200	-	0.00%
22200	Cell Phones & Pagers	600	402	804	600	-	0.00%
	Subtotal	$ 3,200	$ 1,960	$ 3,920	$ 3,130	$ (70)	-2.19%
31000	***Information Technology***						
31100	Computer Hardware	$ 1,000	$ -	$ -	$ 1,000	$ -	0.00%
31150	SCADA Maint. & Support	3,050	915	1,830	1,000	(2,050)	-67.21%
31200	Maintenance & Support Services	-	-	-		-	
31250	Software Purchases	-	-	-		-	#DIV/0!
	Subtotal	$ 4,050	$ 915	$ 1,830	$ 2,000	$ (2,050)	-50.62%
33000	***Supplies***						
33100	Office Supplies	$ -	$ -	$ -		$ -	#DIV/0!
33150	Subscriptions/Reference Material	-	-	-		-	
33350	Postage & Delivery	-	358	716		-	
	Subtotal	$ -	$ 358	$ 716	$ -	$ -	#DIV/0!
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 6,000	$ 2,495	$ 4,990	$ 5,200	$ (800)	-13.33%
41150	Building & Land Lease	-	-	-		-	
41200	Pump Station Maintenance	9,000	-	-	-	(9,000)	-100.00%
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	-	-	-	-	-	#DIV/0!

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Glenmore Wastewater

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41400	Materials, Supplies & Tools	3,000	769	1,538	9,200	6,200	206.67%
41450	Chemicals	2,000	3,466	6,932	5,000	3,000	150.00%
41500	Vehicle Maintenance	1,000	527	1,054	750	(250)	-25.00%
41550	Equipment Repair, Replace, Maint.	20,000	36,970	73,940	34,000	14,000	70.00%
41600	Instrumentation & Metering	5,100	-	-	10,000	4,900	96.08%
41650	Fuel & Lubricants	3,000	929	1,858	2,500	(500)	-16.67%
41700	General Other Maintenance	60,000	28,016	56,032	55,000	(5,000)	-8.33%
	Subtotal	$ 109,100	$ 73,172	$ 146,344	$ 121,650	$ 12,550	11.50%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ -	$ -	$ -	$ -	
81250	Equipment (over $10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	3,700	1,850	3,700	3,800	100	2.70%
	Subtotal	$ 3,700	$ 1,850	$ 3,700	$ 3,800	$ 100	2.70%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ 19,467	$ 8,907	$ 18,982	$ 21,826	$ 2,359	12.12%
95300	Engineering Allocation	25,941	12,004	23,976	29,111	3,170	12.22%
95150	Maintenance Allocation	53,751	28,772	57,029	62,465	8,714	16.21%
95200	Laboratory Allocation	7,748	3,552	7,131	8,160	412	5.32%
	Subtotal	$ 106,907	$ 53,235	$ 107,118	$ 121,562	$ 14,655	13.71%
	Depreciation	$ 10,000	$ 5,000	$ 10,000	$ 10,000	$ -	0.00%
	Subtotal	$ 10,000	$ 5,000	$ 10,000	$ 10,000	$ -	0.00%
	Total	**$ 395,761**	**$ 198,969**	**$ 398,146**	**$ 404,227**	**$ 8,466**	**2.14%**

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Rivanna Water & Sewer Authority
FY 2022 Proposed Budget

Scottsville Wastewater Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Projected Flow (MGD)	0.063			0.065	
Operations Budget					
Projected Revenues					
Operations Rate (monthly)	**$ 25,749**			**$ 27,189**	5.59%
Revenue	$ 308,988	$ 154,494	$ 308,988	$ 326,268	5.59%
Interest Allocation	600	91	182	100	-83.33%
Total Operations Revenues	**$ 309,588**	**$ 154,585**	**$ 309,170**	**$ 326,368**	**5.42%**
Projected Expenses					
Personnel Cost	$ 97,317	$ 45,247	$ 90,137	$ 94,875	-2.51%
Professional Services	2,100	87	174	10,250	388.10%
Other Services and Charges	23,710	15,289	30,285	21,800	-8.06%
Communications	3,720	2,012	4,024	3,400	-8.60%
Information Technology	1,500	478	956	1,500	0.00%
Supplies	500	-	-	-	-100.00%
Operations and Maintenance	57,812	19,310	258,620	58,100	0.50%
Equipment Purchases	3,700	1,850	3,700	3,800	2.70%
Depreciation	20,000	10,000	20,000	20,000	0.00%
Subtotal before allocations	$ 210,359	$ 94,273	$ 407,896	$ 213,725	1.60%
Allocations of Support Departments	99,229	49,125	98,971	112,639	13.51%
Total Operations Expenses	**$ 309,588**	**$ 143,398**	**$ 506,867**	**$ 326,364**	**5.42%**
Operations Cost per 1,000 gallons	$13.463			$13.756	102.18%
Debt Service Budget					
Projected Revenue					
Debt Service Rate (monthly)	**$ 787**			**$ 824**	4.70%
Debt Service Rate Revenue - ACSA	$ 9,442	$ 4,722	$ 9,444	$ 9,882	4.66%
Trust Fund Interest	100	5	10	-	-100.00%
Reserve Fund Interest	4,200	259	518	500	-88.10%
Total Debt Service Revenue	**$ 13,742**	**$ 4,986**	**$ 9,972**	**$ 10,382**	**-24.45%**
Principal, Interest & Reserves					
Total Principal & Interest	$ 7,464	$ 3,732	$ 7,464	$ 7,453	-0.15%
Estimated New Principal & Interest	2,078	259	518	2,431	16.99%
Reserve Additions - Interest	4,200	1,039	2,078	500	-88.10%
Total Debt Principal and Interest	**$ 13,742**	**$ 5,030**	**$ 10,060**	**$ 10,384**	**-24.44%**

Rate Center Summary					
Total Revenues	$ 323,330	$ 159,571	$ 319,142	$ 336,750	4.15%
Total Expenses	323,330	148,428	516,927	336,748	4.15%
Surplus/(Deficit)	**$ -**	**$ 11,143**	**$ (197,785)**	**$ 2**	
Rates (Monthly)					
ACSA	**$ 26,536**			**$ 28,013**	**5.57%**

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Scottsville Wastewater

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 62,100	$ 30,210	$ 60,420	$ 62,200	$ 100	0.16%
11010	Overtime & Holiday Pay	6,000	2,062	4,124	4,000	(2,000)	-33.33%
12010	FICA	5,210	2,394	4,788	5,064	(146)	-2.80%
12020	Health Insurance	14,550	6,718	13,436	15,100	550	3.78%
12026	Employee Assistance Program	16	9	18	15	(1)	-6.25%
12030	Retirement	5,589	2,256	4,512	5,163	(426)	-7.62%
12040	Life Insurance	832	353	706	833	1	0.12%
12050	Fitness Program	70	33	66	80	10	14.29%
12060	Worker's Comp Insurance	800	535	713	800	-	0.00%
	Subtotal	$ 95,167	$ 44,570	$ 88,783	$ 93,255	$ (1,912)	-2.01%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 200	$ 29	$ 58	$ 100	$ (100)	-50.00%
13150	Education & Training	775	220	440	500	(275)	-35.48%
13200	Travel & Lodging	200	-	-	100	(100)	-50.00%
13250	Uniforms	750	395	790	750	-	0.00%
13325	Recruiting & Medical Testing	75	25	50	70	(5)	
13350	Other	150	8	16	100	(50)	-33.33%
	Subtotal	$ 2,150	$ 677	$ 1,354	$ 1,620	$ (530)	-24.65%
	Professional Services						
20100	Legal Fees	$ -	$ -	$ -		$ -	
20200	Financial & Admin. Services	-	-	-		-	
20250	Bond Issue Costs	-	-	-		-	
20300	Engineering & Technical Services	2,100	87	174	10,250	8,150	388.10%
	Subtotal	$ 2,100	$ 87	$ 174	$ 10,250	$ 8,150	
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 700	$ 439	$ 585	$ 800	$ 100	14.29%
21150	Advertising & Communication	-	400	800	-	-	
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	1,010	529	1,058	600	(410)	-40.59%
21300	Authority Dues/Permits/Fees	3,000	3,190	6,380	3,400	400	13.33%
21350	Laboratory Analysis	2,000	1,602	3,204	2,000	-	0.00%
21400	Utilities	17,000	9,129	18,258	15,000	(2,000)	-11.76%
21420	General Other Services	-	-	-	-	-	
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	$ 23,710	$ 15,289	$ 30,285	$ 21,800	$ (1,910)	-8.06%
22000	***Communication***						
22100	Radio	$ 650	$ 413	$ 826	$ 330	$ (320)	-49.23%
22150	Telephone & Data Service	2,800	1,443	2,886	2,800	-	0.00%
22200	Cell Phones & Pagers	270	156	312	270	-	0.00%
	Subtotal	$ 3,720	$ 2,012	$ 4,024	$ 3,400	$ (320)	-8.60%
31000	***Information Technology***						
31100	Computer Hardware	$ 1,000	$ -	$ -	$ 1,000	$ -	0.00%
31150	SCADA Maint. & Support	500	-	-	500	-	0.00%
31200	Maintenance & Support Services	-	-	-		-	
31250	Software Purchases	-	478	956		-	#DIV/0!
	Subtotal	$ 1,500	$ 478	$ 956	$ 1,500	$ -	0.00%
33000	***Supplies***						
33100	Office Supplies	$ -	$ -	$ -	$ -	$ -	#DIV/0!
33150	Subscriptions/Reference Material	-	-	-	-	-	
33350	Postage & Delivery	500	-	-	-	(500)	
	Subtotal	$ 500	$ -	$ -	$ -	$ (500)	-100.00%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 8,000	$ 5,608	$ 11,216	$ 16,600	$ 8,600	107.50%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	1,000	-	-	-	(1,000)	-100.00%
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	-	-	-	-	-	#DIV/0!
41400	Materials, Supplies & Tools	1,500	234	468	2,000	500	33.33%
41450	Chemicals	2,000	580	1,160	5,000	3,000	150.00%
41500	Vehicle Maintenance	1,000	527	1,054	500	(500)	-50.00%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Rate Center: Scottsville Wastewater

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41550	Equipment Repair, Replace, Maint.	16,000	4,878	9,756	17,000	1,000	6.25%
41600	Instrumentation & Metering	2,100	1,513	3,026	5,000	2,900	138.10%
41650	Fuel & Lubricants	1,100	351	702	1,000	(100)	-9.09%
41700	General Other Maintenance	25,112	5,619	231,238	11,000	(14,112)	-56.20%
	Subtotal	$ 57,812	$ 19,310	$ 258,620	$ 58,100	$ 288	0.50%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ -	$ -	$ -	$ -	
81250	Equipment (over $10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	3,700	1,850	3,700	3,800	100	2.70%
	Subtotal	$ 3,700	$ 1,850	$ 3,700	$ 3,800	$ 100	2.70%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ 19,467	$ 8,907	$ 18,982	$ 21,826	$ 2,359	12.12%
95300	Engineering Allocation	25,941	12,004	23,976	29,111	3,170	12.22%
95150	Maintenance Allocation	46,073	24,662	48,882	53,542	7,469	16.21%
95200	Laboratory Allocation	7,748	3,552	7,131	8,160	412	5.32%
	Subtotal	$ 99,229	$ 49,125	$ 98,971	$ 112,639	$ 13,410	13.51%
	Depreciation	$ 20,000	$ 10,000	$ 20,000	$ 20,000	$ -	0.00%
	Subtotal	$ 20,000	$ 10,000	$ 20,000	$ 20,000	$ -	0.00%
	Total	**$ 309,588**	**$ 143,398**	**$ 506,867**	**$ 326,364**	**$ 16,776**	**5.42%**

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Support Departments

Fiscal Year 2021-2022

Rivanna Water and Sewer Authority

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Administration Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Operations Budget					
Projected Revenues & Sources					
Payment for Services SWA	$ 543,000	$ 271,500	$ 543,000	$ 551,000	1.47%
Miscellaneous Revenue	2,000	45,344	45,344	2,000	0.00%
Total Operations Revenues	**$ 545,000**	**$ 316,844**	**$ 588,344**	**$ 553,000**	**1.47%**
Projected Expenses					
Personnel Cost	$ 1,906,136	$ 957,754	$ 1,930,044	$ 2,177,998	14.26%
Professional Services	183,000	36,842	130,430	163,200	-10.82%
Other Services and Charges	80,600	44,394	86,269	86,200	6.95%
Communications	21,500	10,960	21,920	21,000	-2.33%
Information Technology	177,000	96,323	173,526	171,900	-2.88%
Supplies	24,250	10,572	21,144	21,500	-11.34%
Operations and Maintenance	75,200	43,710	94,238	68,600	-8.78%
Equipment Purchases	24,000	7,000	29,000	25,200	5.00%
Depreciation	-	-	-	-	
Total Operations Expenses	**$ 2,491,686**	**$ 1,207,555**	**$ 2,486,571**	**$ 2,735,598**	**9.79%**

Department Summary						
Total Revenues		$ 545,000	$ 316,844	$ 588,344	$ 553,000	1.47%
Total Expenses		2,491,686	1,207,555	2,486,571	2,735,598	9.79%
Net Costs Allocable to Rate Centers		**$ (1,946,686)**	**$ (890,711)**	**$ (1,898,227)**	**$ (2,182,598)**	12.12%
Allocations to the Rate Centers						
Urban Water	44.00%	**$ 856,542**	**$ 391,913**	**$ 835,220**	**$ 960,343**	
Crozet Water	4.00%	**77,867**	**35,628**	**75,929**	**87,304**	
Scottsville Water	2.00%	**38,934**	**17,814**	**37,965**	**43,652**	
Urban Wastewater	48.00%	**934,409**	**427,541**	**911,149**	**1,047,647**	
Glenmore Wastewater	1.00%	**19,467**	**8,907**	**18,982**	**21,826**	
Scottsville Wastewater	1.00%	**19,467**	**8,907**	**18,982**	**21,826**	
	100.00%	**$ 1,946,686**	**$ 890,710**	**$ 1,898,227**	**$ 2,182,598**	

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Administration

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 1,349,200	$ 686,846	$ 1,391,692	$ 1,552,600	$ 203,400	15.08%
11010	Overtime & Holiday Pay	1,500	329	658	2,000	500	33.33%
12010	FICA	103,329	45,544	91,088	118,927	15,598	15.10%
12020	Health Insurance	259,300	127,933	255,866	295,800	36,500	14.08%
12026	Employee Assistance Program	100	149	298	300	200	200.00%
12030	Retirement	121,428	56,687	113,374	128,866	7,438	6.13%
12040	Life Insurance	18,079	8,837	17,674	20,805	2,726	15.08%
12050	Fitness Program	3,000	1,125	2,250	4,000	1,000	33.33%
12060	Worker's Comp Insurance	7,500	5,196	6,928	8,200	700	9.33%
	Subtotal	$ 1,863,436	$ 932,646	$ 1,879,828	$ 2,131,498	$ 268,062	14.39%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 2,000	$ 585	$ 1,170	$ 1,500	$ (500)	-25.00%
13150	Education & Training	19,000	17,679	35,358	22,000	3,000	15.79%
13200	Travel & Lodging	4,000	-	-	4,000	-	0.00%
13250	Uniforms	2,000	168	336	2,000	-	0.00%
13325	Recruiting & Medical Testing	2,400	550	1,100	4,000	1,600	66.67%
13350	Other	13,300	6,126	12,252	13,000	(300)	-2.26%
	Subtotal	$ 42,700	$ 25,108	$ 50,216	$ 46,500	$ 3,800	8.90%
	Professional Services						
20100	Legal Fees	$ 60,000	$ 26,570	$ 53,140	$ 60,000	$ -	0.00%
20200	Financial & Admin. Services	123,000	6,627	70,000	103,200	(19,800)	-16.10%
20250	Bond Issue Costs	-	-	-	-	-	0.00%
20300	Engineering & Technical Services	-	3,645	7,290	-	-	0.00%
	Subtotal	$ 183,000	$ 36,842	$ 130,430	$ 163,200	$ (19,800)	-10.82%
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 12,000	$ 7,528	$ 10,037	$ 4,800	$ (7,200)	-60.00%
21150	Advertising & Communication	13,500	3,174	6,348	17,800	4,300	31.85%
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	4,000	4,290	8,580	5,000	1,000	25.00%
21300	Authority Dues/Permits/Fees	39,100	22,957	45,914	40,000	900	2.30%
21350	Laboratory Analysis	-	-	-	-	-	
21400	Utilities	1,100	434	868	1,100	-	0.00%
21420	General Other Services	2,400	165	330	10,000	7,600	316.67%
21430	Governance & Strategic Support	6,000	5,846	11,692	5,000	(1,000)	-16.67%
21450	Bad Debt	2,500	-	2,500	2,500	-	
	Subtotal	$ 80,600	$ 44,394	$ 86,269	$ 86,200	$ 5,600	6.95%
22000	***Communication***						
22100	Radio	$ 1,300	$ 1,237	$ 2,474	$ 1,000	$ (300)	-23.08%
22150	Telephone & Data Service	11,000	4,177	8,354	11,000	-	0.00%
22200	Cell Phones & Pagers	9,200	5,546	11,092	9,000	(200)	-2.17%
	Subtotal	$ 21,500	$ 10,960	$ 21,920	$ 21,000	$ (500)	-2.33%
31000	***Information Technology***						
31100	Computer Hardware	$ 27,000	$ 25,480	$ 50,960	$ 26,000	$ (1,000)	-3.70%
31150	SCADA Maint. & Support	29,000	6,108	12,216	26,000	(3,000)	
31200	Maintenance & Support Services	99,000	59,560	100,000	101,900	2,900	2.93%
31250	Software Purchases	22,000	5,175	10,350	18,000	(4,000)	-18.18%
	Subtotal	$ 177,000	$ 96,323	$ 173,526	$ 171,900	$ (5,100)	-2.88%
33000	***Supplies***						
33100	Office Supplies	$ 16,000	$ 7,074	$ 14,148	$ 15,000	$ (1,000)	-6.25%
33150	Subscriptions/Reference Material	650	512	1,024	500	(150)	-23.08%
33350	Postage & Delivery	7,600	2,986	5,972	6,000	(1,600)	-21.05%
	Subtotal	$ 24,250	$ 10,572	$ 21,144	$ 21,500	$ (2,750)	-11.34%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 53,000	$ 37,212	$ 74,424	$ 53,000	$ -	0.00%
41150	Building & Land Lease	4,000	2,373	4,746	4,300	300	7.50%
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	-	-	-	-	-	
41400	Materials, Supplies & Tools	10,400	1,591	10,000	5,000	(5,400)	-51.92%
41450	Chemicals	-	-	-	-	-	
41500	Vehicle Maintenance	4,000	1,403	2,806	3,300	(700)	-17.50%
41550	Equipment Repair, Replace, Maint.	-	-	-	-	-	
41600	Instrumentation & Metering	-	-	-	-	-	

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Administration

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41650	Fuel & Lubricants	3,800	1,131	2,262	3,000	(800)	-21.05%
41700	General Other Maintenance	-	-	-	-	-	
	Subtotal	$ 75,200	$ 43,710	$ 94,238	$ 68,600	$ (6,600)	-8.78%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ -	$ -	$ -	$ -	
81250	Equipment (over $10,000)	10,000	-	15,000	10,000	-	0.00%
81300	Vehicle Replacement Fund	14,000	7,000	14,000	15,200	1,200	8.57%
	Subtotal	$ 24,000	$ 7,000	$ 29,000	$ 25,200	$ 1,200	5.00%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ -	$ -	$ -	$ -	$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Depreciation	-	-	-	$ -	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Total	**$ 2,491,686**	**$ 1,207,555**	**$ 2,486,571**	**$ 2,735,598**	**$ 243,912**	**9.79%**

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Maintenance Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Operations Budget					
Projected Revenues					
Miscellaneous Revenue	$ -	$ 3,101	$ 6,202	$ -	
Payment for Services SWA	-	-	-	-	
Total Operations Revenues	**$ -**	**$ 3,101**	**$ 6,202**	**$ -**	
Projected Expenses					
Personnel Cost	$ 1,233,605	$ 680,352	$ 1,353,493	$ 1,398,596	13.37%
Professional Services	-	-	-	-	
Other Services and Charges	50,700	14,046	47,195	61,200	20.71%
Communications	17,400	14,082	1,528	15,730	-9.60%
Information Technology	8,500	5,894	11,788	9,500	11.76%
Supplies	2,000	170	340	2,000	0.00%
Operations and Maintenance	84,550	49,128	98,256	89,600	5.97%
Equipment Purchases	139,000	61,500	123,000	208,100	49.71%
Depreciation	-	-	-	-	
Total Operations Expenses	**$ 1,535,755**	**$ 825,172**	**$ 1,635,600**	**$ 1,784,726**	**16.21%**

Department Summary					
Total Revenues		$ -	$ 3,101	$ 6,202	$ -
Total Expenses		1,535,755	825,172	1,635,600	1,784,726
Net Costs Allocable to Rate Centers		**$ (1,535,755)**	**$ (822,071)**	**$ (1,629,398)**	**$ (1,784,726)**
Allocations to the Rate Centers					
Urban Water	30.00%	**$ 460,727**	**$ 246,621**	**$ 488,819**	**$ 535,418**
Crozet Water	3.50%	**53,751**	**28,772**	**57,029**	**62,465**
Scottsville Water	3.50%	**53,751**	**28,772**	**57,029**	**62,465**
		-		**-**	
Urban Wastewater	56.50%	**867,702**	**464,470**	**920,610**	**1,008,370**
Glenmore Wastewater	3.50%	**53,751**	**28,772**	**57,029**	**62,465**
Scottsville Wastewater	3.00%	**46,073**	**24,662**	**48,882**	**53,542**
	100.00%	**$ 1,535,755**	**$ 822,069**	**$ 1,629,398**	**$ 1,784,725**

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Maintenance

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 805,900	$ 453,256	$ 906,512	$ 951,600	$ 145,700	18.08%
11010	Overtime & Holiday Pay	6,000	7,899	15,798	10,000	4,000	66.67%
12010	FICA	62,110	34,064	68,128	73,562	11,452	18.44%
12020	Health Insurance	229,300	112,624	225,248	223,900	(5,400)	-2.35%
12026	Employee Assistance Program	250	127	254	200	(50)	-20.00%
12030	Retirement	72,531	34,228	68,456	78,983	6,452	8.90%
12040	Life Insurance	10,799	5,353	10,706	12,751	1,952	18.08%
12050	Fitness Program	400	-	-	700	300	75.00%
12060	Worker's Comp Insurance	15,900	10,817	14,423	16,500	600	3.77%
	Subtotal	$ 1,203,190	$ 658,368	$ 1,309,525	$ 1,368,196	$ 165,006	13.71%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 250	$ 75	$ 150	$ 250	$ -	0.00%
13150	Education & Training	14,500	13,911	27,822	14,500	-	0.00%
13200	Travel & Lodging	500	-	-	500	-	0.00%
13250	Uniforms	13,915	6,430	12,860	13,900	(15)	-0.11%
13325	Recruiting & Medical Testing	500	1,466	2,932	500	-	0.00%
13350	Other	750	102	204	750	-	0.00%
	Subtotal	$ 30,415	$ 21,984	$ 43,968	$ 30,400	$ (15)	-0.05%
	Professional Services						
20100	Legal Fees	$ -	$ -	$ -		$ -	
20200	Financial & Admin. Services	-	-	-		-	
20250	Bond Issue Costs	-	-	-		-	
20300	Engineering & Technical Services	-	-	-		-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 6,200	$ 3,889	$ 5,185	$ 7,000	$ 800	12.90%
21150	Advertising & Communication	-	-	-	-	-	
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	42,000	10,152	42,000	51,700	9,700	23.10%
21300	Authority Dues/Permits/Fees	-	5	10	-	-	
21350	Laboratory Analysis	-	-	-	-	-	
21400	Utilities	-	-	-	-	-	
21420	General Other Services	2,500	-	-	2,500	-	0.00%
21430	Governance & Strategic Support	-	-	-		-	
21450	Bad Debt	-	-	-		-	
	Subtotal	$ 50,700	$ 14,046	$ 47,195	$ 61,200	$ 10,500	20.71%
22000	***Communication***						
22100	Radio	$ 7,000	$ 6,998	$ 13,996	$ 5,330	$ (1,670)	-23.86%
22150	Telephone & Data Service	800	345	690	800	-	0.00%
22200	Cell Phones & Pagers	9,600	6,739	13,478	9,600	-	0.00%
	Subtotal	$ 17,400	$ 14,082	$ 28,164	$ 15,730	$ (1,670)	-9.60%
31000	***Information Technology***						
31100	Computer Hardware	$ 4,000	$ 2,113	$ 4,226	$ 5,000	$ 1,000	25.00%
31150	SCADA Maint. & Support	-	-	-	-	-	
31200	Maintenance & Support Services	2,500	3,262	6,524	2,500	-	0.00%
31250	Software Purchases	2,000	519	1,038	2,000	-	0.00%
	Subtotal	$ 8,500	$ 5,894	$ 11,788	$ 9,500	$ 1,000	11.76%
33000	***Supplies***						
33100	Office Supplies	$ 2,000	$ 170	$ 340	$ 2,000	$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-		-	
33350	Postage & Delivery	-	-	-		-	
	Subtotal	$ 2,000	$ 170	$ 340	$ 2,000	$ -	0.00%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 9,900	$ 1,131	$ 2,262	$ 10,250	$ 350	3.54%
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	2,500	6,465	12,930	2,500	-	0.00%
41400	Materials, Supplies & Tools	20,750	13,164	26,328	20,750	-	0.00%
41450	Chemicals	-	-	-	-	-	
41500	Vehicle Maintenance	13,800	7,760	15,520	13,000	(800)	-5.80%
41550	Equipment Repair, Replace, Maint.	21,100	10,147	20,294	26,600	5,500	26.07%
41600	Instrumentation & Metering	1,500	526	1,052	1,500	-	0.00%
41650	Fuel & Lubricants	15,000	9,935	19,870	15,000	-	0.00%
41700	General Other Maintenance	-	-	-	-	-	
	Subtotal	$ 84,550	$ 49,128	$ 98,256	$ 89,600	$ 5,050	5.97%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Maintenance

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
81000	***Equipment Purchases***						
81200	Rental & Leases	$ 1,000	$ -	$ -	$ 100	$ (900)	-90.00%
81250	Equipment (over $10,000)	15,000	-	-	83,000	68,000	453.33%
81300	Vehicle Replacement Fund	123,000	61,500	123,000	125,000	2,000	1.63%
	Subtotal	$ 139,000	$ 61,500	$ 123,000	$ 208,100	$ 69,100	49.71%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ -	$ -	$ -	$ -	$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Depreciation	-	-	-	$ -	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Total	**$ 1,535,755**	**$ 825,172**	**$ 1,662,236**	**$ 1,784,726**	**$ 248,971**	**16.21%**

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Laboratory Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Operations Budget					
Projected Revenues					
N/A					
Projected Expenses					
Personnel Cost	$ 404,171	$ 198,978	$ 395,413	$ 411,036	1.70%
Professional Services	-	-	-	-	
Other Services and Charges	7,600	855	6,043	7,900	3.95%
Communications	2,100	764	-	1,300	-38.10%
Information Technology	2,500	102	1,704	200	-92.00%
Supplies	1,300	638	1,276	1,300	0.00%
Operations and Maintenance	97,250	34,666	69,332	120,590	24.00%
Equipment Purchases	1,600	800	1,600	1,700	6.25%
Depreciation	-	-	-	-	
Total Operations Expenses	**$ 516,521**	**$ 236,803**	**$ 475,368**	**$ 544,026**	**5.33%**

Department Summary						
Total Revenues		$ -	$ -	$ -	$ -	
Total Expenses		516,521	236,803	475,368	544,026	5.33%
Net Costs Allocable to Rate Centers		**$ (516,521)**	**$ (236,803)**	**$ (475,368)**	**$ (544,026)**	
Allocations to the Rate Centers						
Urban Water	44.00%	**$ 227,269**	**$ 104,193**	**$ 209,162**	**$ 239,371**	
Crozet Water	4.00%	**20,661**	**9,472**	**19,015**	**21,761**	
Scottsville Water	2.00%	**10,330**	**4,736**	**9,507**	**10,881**	
		-	**-**	**-**		
Urban Wastewater	47.00%	**242,765**	**111,297**	**223,423**	**255,692**	
Glenmore Wastewater	1.50%	**7,748**	**3,552**	**7,131**	**8,160**	
Scottsville Wastewater	1.50%	**7,748**	**3,552**	**7,131**	**8,160**	
	100.00%	**$ 516,521**	**$ 236,802**	**$ 475,369**	**$ 544,025**	

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Laboratory

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 281,000	$ 145,432	$ 290,864	$ 286,350	$ 5,350	1.90%
11010	Overtime & Holiday Pay	6,000	2,727	5,454	7,800	1,800	30.00%
12010	FICA	21,956	10,939	21,878	22,502	546	2.49%
12020	Health Insurance	54,000	21,956	43,912	56,000	2,000	3.70%
12026	Employee Assistance Program	50	35	70	50	-	0.00%
12030	Retirement	25,290	11,350	22,700	23,767	(1,523)	-6.02%
12040	Life Insurance	3,765	1,756	3,512	3,837	72	1.91%
12050	Fitness Program	500	43	86	700	200	40.00%
12060	Worker's Comp Insurance	5,600	3,815	5,087	5,200	(400)	-7.14%
	Subtotal	$ 398,161	$ 198,053	$ 393,563	$ 406,206	$ 8,045	2.02%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 500	$ 224	$ 448	$ 200	$ (300)	-60.00%
13150	Education & Training	1,680	156	312	1,680	-	0.00%
13200	Travel & Lodging	1,930	-	-	1,500	(430)	-22.28%
13250	Uniforms	1,000	331	662	1,000	-	0.00%
13325	Recruiting & Medical Testing	500	-	-	250	(250)	0.00%
13350	Other	400	214	428	200	(200)	-50.00%
	Subtotal	$ 6,010	$ 925	$ 1,850	$ 4,830	$ (1,180)	-19.63%
	Professional Services						
20100	Legal Fees	$ -	$ -	$ -	$ -	$ -	
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	-	-	-	-	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 400	$ 251	$ 335	$ 400	$ -	0.00%
21150	Advertising & Communication	-	-	-		-	
21250	Watershed Management	-	-	-		-	
21252	EMS Programs/Supplies	-	-	-		-	
21253	Safety Programs/Supplies	700	-	-	1,900	1,200	171.43%
21300	Authority Dues/Permits/Fees	4,500	-	4,500	4,500	-	0.00%
21350	Laboratory Analysis	1,000	604	1,208	1,000	-	0.00%
21400	Utilities	-	-	-	-	-	
21420	General Other Services	1,000	-	-	100	(900)	-90.00%
21430	Governance & Strategic Support	-	-	-	-	-	
21450	Bad Debt	-	-	-	-	-	
	Subtotal	$ 7,600	$ 855	$ 6,043	$ 7,900	$ 300	3.95%
22000	***Communication***						
22100	Radio	$ -	$ -	$ -	$ -	$ -	
22150	Telephone & Data Service	-	-	-	-	-	
22200	Cell Phones & Pagers	2,100	764	1,528	1,300	(800)	-38.10%
	Subtotal	$ 2,100	$ 764	$ 1,528	$ 1,300	$ (800)	
31000	***Information Technology***						
31100	Computer Hardware	$ 1,500	$ -	$ 1,500	$ -	$ (1,500)	-100.00%
31150	SCADA Maint. & Support	-	-	-	-	-	
31200	Maintenance & Support Services	800	102	204	200	(600)	-75.00%
31250	Software Purchases	200	-	-	-	(200)	-100.00%
	Subtotal	$ 2,500	$ 102	$ 1,704	$ 200	$ (2,300)	-92.00%
33000	***Supplies***						
33100	Office Supplies	$ 800	$ 504	$ 1,008	$ 800	$ -	0.00%
33150	Subscriptions/Reference Material	-	-	-	-	-	#DIV/0!
33350	Postage & Delivery	500	134	268	500	-	0.00%
	Subtotal	$ 1,300	$ 638	$ 1,276	$ 1,300	$ -	0.00%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ -	$ 256	$ 512	$ -	$ -	
41150	Building & Land Lease	-	-	-	-	-	
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-	-	
41350	Pipeline/Appurtenances	-	-	-	-	-	
41400	Materials, Supplies & Tools	33,000	17,191	34,382	25,000	(8,000)	-24.24%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Laboratory

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41450	Chemicals	21,300	9,029	18,058	28,000	6,700	31.46%
41500	Vehicle Maintenance	3,500	1,468	2,936	-	(3,500)	
41550	Equipment Repair, Replace, Maint.	23,400	6,510	13,020	14,800	(8,600)	-36.75%
41600	Instrumentation & Metering	15,500	-	-	52,240	36,740	237.03%
41650	Fuel & Lubricants	550	212	424	550	-	0.00%
41700	General Other Maintenance	-	-	-	-	-	
	Subtotal	$ 97,250	$ 34,666	$ 69,332	$ 120,590	$ 23,340	24.00%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ -	$ -	$ -	$ -	
81250	Equipment (over $10,000)	-	-	-	-	-	
81300	Vehicle Replacement Fund	1,600	800	1,600	1,700	100	6.25%
	Subtotal	$ 1,600	$ 800	$ 1,600	$ 1,700	$ 100	6.25%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ -	$ -	$ -	$ -	$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Depreciation	-	-	-	$ -	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Total	**$ 516,521**	**$ 236,803**	**$ 476,896**	**$ 544,026**	**$ 27,505**	**5.33%**

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Engineering Summary

	FY 2021			FY 2022	
	Budgeted FY 2021	Actual for 6 months	Projected 12 months	***Proposed Budget***	***Budget % Change***
Operations Budget					
Projected Revenues					
Payment for Services SWA	$ -	$ 9,510	$ 19,020	$ -	
Total Operations Revenues	**$ -**	**$ 9,510**	**$ 19,020**	**$ -**	
Projected Expenses					
Personnel Cost	$ 1,469,357	$ 726,642	$ 1,452,517	$ 1,623,811	10.51%
Professional Services	30,000	9,273	18,546	20,000	-33.33%
Other Services and Charges	13,800	6,873	12,366	21,600	56.52%
Communications	16,200	10,008	20,016	15,922	-1.72%
Information Technology	41,500	21,714	43,428	118,500	185.54%
Supplies	9,800	2,789	5,578	8,790	-10.31%
Operations and Maintenance	127,250	21,719	43,438	98,635	-22.49%
Equipment Purchases	21,500	10,750	21,500	33,500	55.81%
Depreciation	-	-	-	-	
Total Operations Expenses	**$ 1,729,407**	**$ 809,768**	**$ 1,617,389**	**$ 1,940,758**	**12.22%**

Department Summary						
Total Revenues		$ -	$ 9,510	$ 19,020	$ -	
Total Expenses		1,729,407	809,768	1,617,389	1,940,758	12.22%
Net Costs Allocable to Rate Centers		**$ (1,729,407)**	**$ (800,258)**	**$ (1,598,369)**	**$ (1,940,758)**	
Allocations to the Rate Centers						
Urban Water	47.00%	**$ 812,821**	**$ 376,121**	**$ 751,233**	**$ 912,156**	
Crozet Water	4.00%	**69,176**	**32,010**	**63,935**	**77,630**	
Scottsville Water	2.00%	**34,588**	**16,005**	**31,967**	**38,815**	
Urban Wastewater	44.00%	**760,939**	**352,114**	**703,282**	**853,934**	
Glenmore Wastewater	1.50%	**25,941**	**12,004**	**23,976**	**29,111**	
Scottsville Wastewater	1.50%	**25,941**	**12,004**	**23,976**	**29,111**	
	100.00%	**$ 1,729,406**	**$ 800,258**	**$ 1,598,369**	**$ 1,940,757**	

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Engineering

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 1,035,480	$ 532,379	$ 1,064,758	$ 1,149,900	$ 114,420	11.05%
11010	Overtime & Holiday Pay	10,000	8,492	16,984	15,000	5,000	50.00%
12010	FICA	79,979	39,580	79,160	89,115	9,136	11.42%
12020	Health Insurance	175,300	75,889	151,778	196,000	20,700	11.81%
12026	Employee Assistance Program	180	114	228	150	(30)	-16.67%
12030	Retirement	93,193	43,705	87,410	95,442	2,249	2.41%
12040	Life Insurance	13,875	6,792	13,584	15,409	1,534	11.06%
12050	Fitness Program	2,000	1,298	2,596	4,000	2,000	100.00%
12060	Worker's Comp Insurance	20,800	14,147	18,863	20,300	(500)	-2.40%
	Subtotal	$ 1,430,807	$ 722,396	$ 1,435,361	$ 1,585,316	$ 154,509	10.80%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 2,900	$ 384	$ 768	$ 3,100	$ 200	6.90%
13150	Education & Training	13,900	2,618	13,900	14,200	300	2.16%
13200	Travel & Lodging	15,100	-	-	15,100	-	0.00%
13250	Uniforms	4,450	1,077	2,154	4,495	45	1.01%
13325	Recruiting & Medical Testing	600	-	-	600	-	0.00%
13350	Other	1,600	167	334	1,000	(600)	-37.50%
	Subtotal	$ 38,550	$ 4,246	$ 17,156	$ 38,495	$ (55)	-0.14%
	Professional Services						
20100	Legal Fees	$ 15,000	$ 1,288	$ 2,576	$ 5,000	$ (10,000)	-66.67%
20200	Financial & Admin. Services	-	-	-	-	-	
20250	Bond Issue Costs	-	-	-	-	-	
20300	Engineering & Technical Services	15,000	7,985	15,970	15,000	-	0.00%
	Subtotal	$ 30,000	$ 9,273	$ 18,546	$ 20,000	$ (10,000)	-33.33%
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 3,300	$ 2,070	$ 2,760	$ 3,900	$ 600	18.18%
21150	Advertising & Communication	200	-	-	200	-	0.00%
21250	Watershed Management	-	-	-	-	-	
21252	EMS Programs/Supplies	-	-	-	-	-	
21253	Safety Programs/Supplies	3,000	2,146	4,292	8,000	5,000	166.67%
21300	Authority Dues/Permits/Fees	1,500	2,500	5,000	1,500	-	0.00%
21350	Laboratory Analysis	250	-	-	2,500	2,250	900.00%
21400	Utilities	550	157	314	500	(50)	-9.09%
21420	General Other Services	-	-	-	-	-	
21430	Governance & Strategic Support	5,000	-	-	5,000	-	
21450	Bad Debt	-	-	-		-	
	Subtotal	$ 13,800	$ 6,873	$ 12,366	$ 21,600	$ 7,800	56.52%
22000	***Communication***						
22100	Radio	$ 4,800	$ 4,537	$ 9,074	$ 3,670	$ (1,130)	-23.54%
22150	Telephone & Data Service	1,500	901	1,802	1,500	-	0.00%
22200	Cell Phones & Pagers	9,900	4,570	9,140	10,752	852	8.61%
	Subtotal	$ 16,200	$ 10,008	$ 20,016	$ 15,922	$ (278)	-1.72%
31000	***Information Technology***						
31100	Computer Hardware	$ 11,000	$ 3,456	$ 6,912	$ 12,000	$ 1,000	9.09%
31150	SCADA Maint. & Support	-	-	-	-	-	
31200	Maintenance & Support Services	26,000	17,961	35,922	102,000	76,000	292.31%
31250	Software Purchases	4,500	297	594	4,500	-	0.00%
	Subtotal	$ 41,500	$ 21,714	$ 43,428	$ 118,500	$ 77,000	185.54%
33000	***Supplies***						
33100	Office Supplies	$ 5,000	$ 1,860	$ 3,720	$ 4,000	$ (1,000)	-20.00%
33150	Subscriptions/Reference Material	4,300	618	1,236	4,290	(10)	-0.23%
33350	Postage & Delivery	500	311	622	500	-	0.00%
	Subtotal	$ 9,800	$ 2,789	$ 5,578	$ 8,790	$ (1,010)	-10.31%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 29,700	$ 3,860	$ 7,720	$ 12,440	$ (17,260)	-58.11%
41150	Building & Land Lease	26,400	852	1,704	26,400	-	0.00%
41200	Pump Station Maintenance	-	-	-	-	-	
41300	Dam Maintenance	-	-	-	-		
41350	Pipeline/Appurtenances	16,350	10,831	21,662	15,395	(955)	-5.84%
41400	Materials, Supplies & Tools	25,300	1,680	3,360	14,900	(10,400)	-41.11%
41450	Chemicals		-	-	-	-	
41500	Vehicle Maintenance	24,000	1,045	2,090	24,000	-	0.00%
41550	Equipment Repair, Replace, Maint.	500	1,045	2,090	500	-	0.00%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Department: Engineering

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41600	Instrumentation & Metering	-	-	-	-	-	
41650	Fuel & Lubricants	5,000	2,406	4,812	5,000	-	0.00%
41700	General Other Maintenance	-	-	-	-	-	
	Subtotal	$ 127,250	$ 21,719	$ 43,438	$ 98,635	$ (28,615)	-22.49%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ -	$ -	$ -		$ -	
81250	Equipment (over $10,000)	-	-	-	12,000	12,000	
81300	Vehicle Replacement Fund	21,500	10,750	21,500	21,500	-	0.00%
	Subtotal	$ 21,500	$ 10,750	$ 21,500	$ 33,500	$ 12,000	55.81%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ -	$ -	$ -	$ -	$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Depreciation	-	-	-	$ -	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Total	**$ 1,729,407**	**$ 809,768**	**$ 1,617,389**	**$ 1,940,758**	**$ 211,351**	**12.22%**

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APPENDICES

Rivanna Water and Sewer Authority

Fiscal Year 2021-2022

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Flow Projections

	(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
	FY 2021	***FY 2022***	***% Change***	***FY 2021***	***FY 2022***	***% Change***
Water						
Urban	3,397,700	3,397,700	0.00%	9.309	9.309	0.00%
Crozet	198,830	202,697	1.94%	0.545	0.555	1.83%
Scottsville	17,245	17,230	-0.09%	0.047	0.047	0.00%
Total	3,613,775	3,617,627	0.11%	9.901	9.911	0.10%
Wastewater						
Urban	3,390,400	3,390,400	0.00%	9.289	9.289	0.00%
Glenmore	41,629	41,401	-0.55%	0.114	0.113	-0.88%
Scottsville	23,126	23,643	2.24%	0.063	0.065	3.17%
Total	3,455,155	3,455,444	0.01%	9.466	9.467	0.01%

Allocation (Urban Area Only)	***FY 2021***	***FY 2022***	**Allocation** ***% Change***
Water			
City	51%	49%	-3.92%
ACSA	49%	51%	4.08%
Wastewater			
City	49%	48%	-2.04%
ACSA	51%	52%	1.96%

FY 2022 allocations are based on FY 2020 retail flows reported by the City and ACSA.

	(1,000 GALLONS)			(MILLION GALLONS PER DAY)		
Allocation (Urban Area Only)	***FY 2021***	***FY 2022***	***% Change***	***FY 2021***	***FY 2022***	***% Change***
Water						
City	1,732,827	1,664,873	-3.92%	4.747	4.561	-3.92%
ACSA	1,664,873	1,732,827	4.08%	4.561	4.747	4.08%
	3,397,700	3,397,700				
Wastewater						
City	1,661,296	1,627,392	-2.04%	4.551	4.459	-2.02%
ACSA	1,729,104	1,763,008	1.96%	4.737	4.830	1.96%
	3,390,400	3,390,400				

URBAN WATER DEBT SERVICE COSTS

Summary of Debt Service Budget to be included in Monthly Charges

City Allocation of Debt Service Costs	Estimated Debt Service Budget FY 2022	City %	City Amount	Annual Total
ALLOCATION BASED ON FLOWS				
Regional Water System Projects:				
9.2% of 2019 Refunding Bond	$ 129,622	49.00%	$ 63,515	
14.2% of 2015B Bond - New Projects	240,012	49.00%	117,606	**181,121**
Revenues that offset Debt Service				
Trust Fund Interest	(12,000)	49.00%	(5,880)	
Use of Reserves	-	FIXED	-	
Lease Revenues	(1,600)	49.00%	(784)	**(6,664)**
RATES BASED ON FIXED AGREEMENTS				
2003 & 2012 Urban Water Agreement				
Water Supply Expansion (15%/85%)				
100% of 2012B Revenue Bond	1,339,706	15.00%	200,956	
9.0% of 2015B Bond - Refunding	142,062	15.00%	21,309	
Water Pipeline (20%/80%)				
10.4% of 2018 Bond	234,428	20.00%	46,886	
Non-Water Supply - Other Projects (48%/52%)				
47.4% of 2015B Bond - Refunding	748,194	48.00%	359,133	
77.8% of 2015B Bond - New Projects	1,314,993	48.00%	631,197	
37.7% of 2018 Bond	850,618	48.00%	408,297	
South Rivanna Expansion of 1999				
10.3% of 2015B Bond - Refunding	162,582	0.00%	-	**1,667,778**
Southern Loop Water Line, West Branch				
0.8% of 2019 Refunding Bond	10,747	24.51%	2,634	**2,634**
South Rivanna Connector Main				
3.0% of 2019 Refunding Bond	42,311	52.00%	22,002	**22,002**
DEBT SERVICE PROJECTED FROM 5-YEAR CIP				
CIP Growth Charge from 2022-2026 CIP	2,020,050	FIXED	931,380	**931,380**
Debt Service Coverage Ratio / Policy Charge	400,000	39.00%	156,000	**156,000**
Total Debt Service For Rate Computation	**$ 7,621,725**		**$ 2,954,251**	**$ 2,954,251**

ACSA Allocation of Debt Service Costs	Estimated Debt Service Budget FY 2022	ACSA %	ACSA Amount	Annual Total
ALLOCATION BASED ON FLOWS				
Regional Water System Projects:				
9.2% of 2019 Refunding Bond	$ 129,622	51.00%	$ 66,107	
14.2% of 2015B Bond - New Projects	240,012	51.00%	122,406	**188,513**
Revenues that offset Debt Service				
Trust Fund Interest	(12,000)	51.00%	(6,120)	
Use of Reserves	-	FIXED	-	
Lease Revenues	(1,600)	51.00%	(816)	**(6,936)**
RATES BASED ON FIXED AGREEMENTS				
2003 & 2012 Urban Water Agreement				
Water Supply Expansion (15%/85%)				
100% of 2012B Revenue Bond	1,339,706	85.00%	1,138,750	
9.0% of 2015B Bond - Refunding	142,062	85.00%	120,753	
Water Pipeline (20%/80%)				
10.4% of 2018 Bond	234,428	80.00%	187,542	
Non-Water Supply - Other Projects (48%/52%)				
47.4% of 2015B Bond - Refunding	748,194	52.00%	389,061	
77.8% of 2015B Bond - New Projects	1,314,993	52.00%	683,796	
37.7% of 2018 Bond	850,618	52.00%	442,321	
South Rivanna Expansion of 1999				
10.3% of 2015B Bond - Refunding	162,582	100.00%	162,582	**3,124,805**
Southern Loop Water Line, West Branch				
0.8% of 2019 Refunding Bond	10,747	75.49%	8,113	**8,113**
South Rivanna Connector Main				
3.0% of 2019 Refunding Bond	42,311	48.00%	20,309	**20,309**
DEBT SERVICE PROJECTED FROM 5-YEAR CIP				
CIP Growth Charge from 2022-2026 CIP	2,020,050	FIXED	1,088,670	**1,088,670**
Debt Service Coverage Ratio / Policy Charge	400,000	61.00%	244,000	**244,000**
Total Debt Service For Rate Computation	**$ 7,621,725**		**$ 4,667,474**	**$ 4,667,474**

SUMMARY OF DEBT SERVICE REVENUES:		
CITY SHARE OF TOTAL DEBT SERVICE	**$ 2,954,251**	**39%**
ACSA SHARE OF TOTAL DEBT SERVICE	**4,667,474**	**61%**
	$ 7,621,725	**100%**

URBAN WASTEWATER DEBT SERVICE COSTS
Summary of Debt Service Budget to be Included in Charges

City Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2022	FY 2021	FY 2020	FY 2019	FY 2018	FY 2017	City %	City Amount	
ALLOCATION BASED ON FLOWS										
System Projects Rate										
	22.9% of 2015B Bond Refunding	$ 361,469	$ 361,666	361,335	363,207	362,261	362,293	48%	$ 173,505	
	100% 2005A Bond VRA/VRLF	150,976	159,339	159,339	159,339	159,339	159,339	48%	72,468	
	88.5% of 2009A Bond VRA/VRLF	1,419,716	1,419,716	1,419,716	1,419,716	1,419,716	1,419,716	48%	681,464	
	37.9% of 2011 A,B Bond VRA/RLF	192,130	192,130	192,130	192,130	192,130	205,219	48%	92,222	
	24.5% of 2019 Refunding Bond	344,658	345,546	370,610	369,811	370,267	370,533	48%	165,436	
	100% of 2016 Bond	626,278	626,383	627,265	626,924	626,347		48%	300,613	
	2.4% of 2018 Bond	54,376	54,401	54,341				48%	26,100	**1,511,808**
Revenues/Reserves that offset Debt Service										
	County MOU - Septage	(109,440)	(109,440)	(109,440)	(109,440)	(109,440)	(109,440)	48%	(52,531)	
	Use of Reserves	-	(94,400)	-	(300,000)	(600,000)	-	Fixed	-	
	Trust Fund Interest	(18,500)	(74,000)	(96,900)	(26,200)	(26,200)	(26,800)	48%	(8,880)	**(61,411)**
ALLOCATION BASED ON FIXED AGREEMENTS										
2014 Wastewater Agreement										
Meadowcreek	**97.9% of 2010A and 10.9% of 2019 Bonds**	1,095,883	1,096,278	1,107,418	1,107,062	1,107,265	1,170,954	Segments	899,283	
Wet Weather MCWWTP	**11.5% of 2009A and 62.1% of 2011 A/B Bonds**	499,293	499,293	499,293	499,293	499,293	520,739	Segments	317,447	
Moores Creek Pump Stn.	**100% of 2011 D/E Bond**	296,945	296,945	296,944	296,944	296,944	317,130	Segments	181,964	
Rivanna Pump Stn. & F.M.	**5.8% of 2019 and 100% of 2014A Bonds**	1,851,847	1,963,640	1,969,538	1,969,350	1,969,458	1,226,804	Segments	1,159,705	
Albemarle Berkley Pump Stn.	**3.4% of 2019 Refunding Bond**	47,306	47,428	50,868	50,758	50,821	50,858	0%	-	
Crozet Interceptor	**2.3% of 2019 and 13.8% of 2018**	343,580	343,802	345,835	35,047	35,091	35,116	0%	-	
Schenks Branch Agreement	**16.1% of 2019, 2.1% of 2010A, and 100% of 2015A Bonds**	315,680	316,260	332,642	332,119	332,417	298,632	100%	315,680	**2,874,079**
Four Party Rate										
Regional System Projects	**3.9% of 2019 Refunding Bond**	54,076	54,216	56,341	71,370	85,041	172,238	N/A	17,077	
Crozet Interceptor	**0.7% of 2019 Refunding Bond**	10,775	10,803	11,226	14,221	16,945	34,319	N/A	3,403	
Facilities Purchase	**1.4% of 2019 Refunding Bond**	19,736	19,786	20,562	26,047	31,037	62,860	N/A	6,232	**26,712**
Moores Creek Relief IS, Pt 1	**0.3% of 2019 Refunding Bond**	4,488	4,499	4,676	5,923	7,058	14,294	30%	1,346	**1,346**
DEBT SERVICE PROJECTED FROM 5-YEAR CIP										
CIP Growth Charge from 2022-2026 CIP		681,950	369,800	230,400	426,200	233,900	486,000	Fixed	405,350	**405,350**
Debt Service Coverage Ratio / Policy Charge		325,000	325,000	325,000	325,000	325,000	325,000	58%	188,500	**188,500**
	Total	**$ 8,568,222**	**$ 8,229,091**	**$ 8,229,139**	**$ 7,854,821**	**$ 7,384,690**	**$ 7,095,804**		**$ 4,946,384**	**$ 4,946,384**

ACSA Allocation of Debt Service Costs		Estimated Debt Service Budget FY 2022	ACSA %	ACSA Amount	
ALLOCATION BASED ON FLOWS					
System Projects Rate					
	22.9% of 2015B Bond Refunding	$ 361,469	52%	$ 187,964	
	100% 2005A Bond VRA/VRLF	150,976	52%	78,508	
	88.5% of 2009A Bond VRA/VRLF	1,419,716	52%	738,252	
	37.9% of 2011 A,B Bond VRA/RLF	192,130	52%	99,908	
	24.5% of 2019 Refunding Bond	344,658	52%	179,222	
	100% of 2016 Bond	626,278	52%	325,665	
	2.4% of 2018 Bond	54,376	52%	28,276	**1,637,795**
Revenues/Reserves that offset Debt Service					
	County MOU - Septage	(109,440)	52%	(56,909)	
	Use of Reserves	-	52%	-	
	Trust Fund Interest	(18,500)	52%	(9,620)	**(66,529)**
ALLOCATION BASED ON FIXED AGREEMENTS					
2014 Wastewater Agreement					
Meadowcreek	**97.9% of 2010A and 10.9% of 2019 Bonds**	1,095,883	Segments	196,600	
Wet Weather MCWWTP	**11.5% of 2009A and 62.1% of 2011 A/B Bonds**	499,293	Segments	181,845	
Moores Creek Pump Stn.	**100% of 2011 D/E Bond**	296,945	Segments	114,981	
Rivanna Pump Stn. & F.M.	**5.8% of 2019 and 100% of 2014A Bonds**	1,851,847	Segments	692,142	
Albemarle Berkley Pump Stn.	**3.4% of 2019 Refunding Bond**	47,306	100%	47,306	
Crozet Interceptor	**2.3% of 2019 and 13.8% of 2018**	343,580	100%	343,580	
Schenks Branch Agreement	**16.1% of 2019, 2.1% of 2010A, and 100% of 2015A Bonds**	315,680	0%	-	**1,576,454**
Four Party Rate					
Regional System Projects	**3.9% of 2019 Refunding Bond**	54,076	N/A	36,999	
Crozet Interceptor	**0.7% of 2019 Refunding Bond**	10,775	N/A	7,372	
Facilities Purchase	**1.4% of 2019 Refunding Bond**	19,736	N/A	13,504	**57,875**
Moores Creek Relief IS, Pt 1	**0.3% of 2019 Refunding Bond**	4,488	70%	3,142	**3,142**
DEBT SERVICE PROJECTED FROM 5-YEAR CIP					
CIP Growth Charge from 2022-2026 CIP		681,950	Fixed	276,600	**276,600**
Debt Service Coverage Ratio / Policy Charge		325,000	42%	136,500	**136,500**
	Total	**$ 8,568,222**		**$ 3,621,837**	**$ 3,621,837**

SUMMARY OF DEBT SERVICE REVENUES:					
CITY SHARE OF TOTAL DEBT SERVICE	**$ 4,946,384**	**$ 4,899,122**	**$ 4,714,093**	**$ 232,291**	**58%**
ACSA SHARE OF TOTAL DEBT SERVICE	**3,621,837**	**2,955,698**	**2,670,596**	**$ 951,241**	**42%**
	$ 8,568,221	**$ 7,854,820**	**$ 7,384,689**	**$ 1,183,532**	**100%**

OTHER RATE CENTERS DEBT SERVICE RATES

Summary of Debt Service Payments Due	Existing Estimated Debt Service Budget FY 2022	FY 2021	Estimated New Debt Service	ACSA Monthly Rate
WATER				
Crozet Water				
System Upgrades				
13.9% of 2019 Refunding Bond	$ 194,193	$ 194,693		
17.0% of 2012A Bond (new money)	-	-		
7.4% of 2015B Bond Refunding	116,807	116,870		
5.9% of 2015B Bond New Projects	99,723	99,703		
35.7% of 2018 Bond	805,944	806,303		
Estimated DS - CIP Growth Charge	634,070	303,600	**$ 330,470**	
Revenues that offset Debt Service				
Use of Reserves	-	(198,252)		
Trust Fund Interest	(2,900)	(11,600)	-	
	$ 1,847,837	$ 1,311,317	$ 330,470	**$ 153,986**
Scottsville Water				
System Upgrades				
3.4% of 2019 Refunding Bond	$ 47,778	$ 47,902		
4.2% of 2012A Bond (new money)	-	-		
2.7% of 2015B Bond Refunding	42,619	42,642		
2.1% of 2015B Bond New Projects	35,495	35,488		
Estimated DS - CIP Growth Charge	13,299	3,917	**$ 9,382**	
Revenues that offset Debt Service				
Trust Fund Interest	(300)	(1,200)	-	
	$ 138,891	$ 128,749	$ 9,382	**$ 11,574**
WASTEWATER				
Glenmore Wastewater				
System Upgrades				
0.1% of 2015B Bond Refunding	$ 1,578	$ 1,579		
Estimated DS - CIP Growth Charge	5,834	2,199	**$ 3,635**	
Revenues that offset Debt Service				
Trust Fund Interest	-	-	-	
	$ 7,412	$ 3,778	$ 3,635	**$ 618**
Scottsville Wastewater				
Facilities Purchase				
0.3% of 2012A Refunding Bond	$ -	$ -		
System Upgrades				
0.3% of 2019 Refunding Bond	4,294	4,305		
0.2% of 2015B Bond Refunding	3,159	3,159		
Estimated DS - CIP Growth Charge	2,431	2,078	**$ 353**	
Revenues that offset Debt Service				
Trust Fund Interest	-	(100)	-	
	$ 9,884	$ 9,442	$ 353	**$ 824**
TOTAL	**$ 2,004,024**	**$ 1,453,286**	**$ 343,840**	**$ 167,002**

DEBT SUMMARY

	Total Revenue Bond Debt	Total FY 2022 Debt Service	Total FY 2021 Debt Service
CURRENT EXISTING DEBT			
DEBT BY BOND ISSUE			
2005 A Bond VRA/VRLF	$ 802,035	$ 150,976	$ 159,339
2009A Bond	13,395,034	1,604,199	1,604,199
2010A Bond	8,270,329	962,522	962,522
2011A Bond	4,171,566	443,608	443,608
2011B Bond	595,552	63,332	63,332
2011D,E Bond	2,911,016	296,944	296,944
2012A Bond (refunding & new money)	1,340,000	701,966	706,969
2012B Bond	21,395,000	1,339,706	1,338,656
2014A Bond	23,424,826	1,770,751	1,882,336
2015A Bond	942,001	70,593	70,593
2015B Bond (refunding & new money)	37,435,000	3,268,691	3,269,216
2016 Bond	8,357,000	626,278	626,383
2018 Bond	35,705,000	2,256,281	2,257,288
2019 Bond	17,430,000	700,225	698,836
	$ 176,174,359	**$ 14,256,072**	**$ 14,380,221**

Ratio of Debt Service / Total Debt *8.1%*

PRINCIPAL AND INTEREST PAYMENTS BY CENTER - Annual		
Urban Water	$ 5,215,275	$ 5,215,445
Crozet Water	1,216,667	1,217,569
Scottsville Water	125,892	126,032
Urban Wastewater	7,689,212	7,812,130
Glenmore Wastewater	1,578	1,579
Scottsville Wastewater	7,453	7,464
	$ 14,256,077	**$ 14,380,219**

Stone Robinson School WWTP Estimated Charges

		Total	*Monthly*
Expenses			
Fixed Costs			
Wages	$	7,471	
Benefits		3,915	
Mileage		1,165	
Subtotal	$	12,551	
Overhead at 35%		4,393	
Total Fixed Charge	$	16,944	
Variable Costs			
Repairs, Maintenance, Other	$	2,700	
Engineering Consultant	$	10,000	
Overhead at 35%		945	
Total Variable Charge	$	13,645	
Total Annual Charge Estimate	$	30,589	$ 2,549

All Rate Centers

Detailed Summary of Revenues

	FY 2021	*FY 2022*	*$ Change*	*% Change*
OPERATIONS				
Operations Rate Revenues	$ 17,381,293	$ 18,810,555	$ 1,429,262	8.22%
Other Operations Revenues				
Interest Allocation	$ 35,100	$ 8,200	$ (26,900)	-76.64%
Stone Robinson WWTP	22,788	20,589	(2,199)	-9.65%
Septage/Sludge Acceptance	475,000	475,000	-	0.00%
Leases	105,000	105,000	-	0.00%
Administration	545,000	553,000	8,000	1.47%
Nutrient Credits	45,000	45,000	-	0.00%
Use of Reserves	775,247	516,250	(258,997)	-33.41%
Miscellaneous	-	-	-	
	$ 2,003,135	$ 1,723,039	$ (280,096)	-13.98%
Total Operations Revenues	$ 19,384,428	$ 20,533,594	$ 1,149,166	5.93%
DEBT SERVICE				
Debt Service Rate Revenues				
City	$ 7,214,025	$ 7,900,635	$ 686,610	9.52%
ACSA	8,646,991	10,293,325	1,646,334	19.04%
	$ 15,861,016	$ 18,193,960	$ 2,332,944	14.71%
Other Debt Service Revenues				
Interest	801,900	113,700	(688,200)	-85.82%
County MOU - Septage	109,440	109,440	-	0.00%
Use of Reserves	954,652	-	(954,652)	
Leases	1,600	1,600	-	0.00%
	$ 1,867,592	$ 224,740	$ (1,642,852)	-87.97%
Total Debt Service Revenues	$ 17,728,608	$ 18,418,700	$ 690,092	3.89%
Total Revenues	$ 37,113,036	$ 38,952,294	$ 1,839,258	4.96%
Reserves used as revenues offset	*$ 1,729,899*	*$ 516,250*	*$ (1,213,649)*	*-170%*
Actual Revenues	35,383,137	38,436,044	3,052,907	

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Authority as a Whole

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
10000	***Salaries & Benefits***						
11000	Salaries	$ 5,908,780	$ 3,092,991	$ 6,203,982	$ 6,521,900	$ 613,120	10.38%
11010	Overtime Pay	304,000	152,570	288,390	280,800	(23,200)	-7.63%
12010	FICA	475,278	234,929	469,858	520,405	45,127	9.49%
12020	Health Insurance	1,303,300	587,904	1,175,808	1,379,000	75,700	5.81%
12026	Employee Assistance Program	1,286	798	1,596	1,305	19	1.48%
12030	Retirement	531,791	243,918	487,836	541,319	9,528	1.79%
12040	Life Insurance	79,177	37,988	75,976	87,392	8,215	10.38%
12050	Fitness Program	11,640	4,067	8,134	15,110	3,470	29.81%
12060	Worker's Comp Insurance	94,100	64,089	85,452	94,500	400	0.43%
	Subtotal	$ 8,709,352	$ 4,419,254	$ 8,797,032	$ 9,441,731	$ 732,379	8.41%
13000	***Other Personnel Costs***						
13100	Employee Dues & Licenses	$ 9,930	$ 2,964	$ 7,428	$ 9,180	$ (750)	-7.55%
13150	Education & Training	81,105	53,319	115,302	84,980	3,875	4.78%
13200	Travel & Lodging	29,930	88	176	29,750	(180)	-0.60%
13250	Uniforms	53,565	28,005	56,010	58,025	4,460	8.33%
13325	Recruiting & Medical Testing	7,625	2,954	6,538	8,370	745	9.77%
13350	Other	21,750	7,414	14,828	17,950	(3,800)	-17.47%
	Subtotal	$ 203,905	$ 94,744	$ 200,282	$ 208,255	$ 4,350	2.13%
	Professional Services						
20100	Legal Fees	$ 100,000	$ 51,816	$ 103,632	$ 90,000	$ (10,000)	-10.00%
20200	Financial & Admin. Services	123,000	17,815	92,376	103,200	(19,800)	-16.10%
20250	Bond Issue Costs	-	-	-	-	-	0.00%
20300	Engineering & Technical Services	379,700	238,897	543,742	518,850	139,150	36.65%
	Subtotal	$ 602,700	$ 308,528	$ 739,750	$ 712,050	$ 109,350	18.14%
	Other Services and Charges						
21100	General Liability/Property Ins.	$ 128,600	$ 80,670	$ 107,559	$ 119,400	$ (9,200)	-7.15%
21150	Advertising & Communication	16,700	5,074	10,148	18,000	1,300	7.78%
21250	Watershed Management	80,000	101,995	150,000	77,000	(3,000)	-3.75%
21252	EMS Programs/Supplies	2,000	-	-	-	(2,000)	-100.00%
21253	Safety Programs/Supplies	114,130	61,233	144,162	108,450	(5,680)	-4.98%
21300	Authority Dues/Permits/Fees	103,500	55,535	118,108	107,690	4,190	4.05%
21350	Laboratory Analysis	105,700	47,376	94,752	107,360	1,660	1.57%
21400	Utilities	1,564,650	807,715	1,627,330	1,569,600	4,950	0.32%
21420	General Other Services	1,008,000	545,530	1,091,060	991,400	(16,600)	-1.65%
21430	Governance & Strategic Support	11,000	6,426	12,852	10,000	(1,000)	-9.09%
21450	Bad Debt	2,500	-	2,500	2,500	-	
	Subtotal	$ 3,136,780	$ 1,711,554	$ 3,358,471	$ 3,111,400	$ (25,380)	-0.81%
22000	***Communication***						
22100	Radio	$ 24,450	$ 22,953	$ 40,746	$ 17,990	$ (6,460)	-26.42%
22150	Telephone & Data Service	88,000	62,504	125,008	126,000	38,000	43.18%
22200	Cell Phones & Pagers	48,570	28,125	56,250	47,422	(1,148)	-2.36%
	Subtotal	$ 161,020	$ 113,582	$ 222,004	$ 191,412	$ 30,392	18.87%
31000	***Information Technology***						
31100	Computer Hardware	$ 67,900	$ 34,463	$ 77,708	$ 67,000	$ (900)	-1.33%
31150	SCADA Maint. & Support	163,050	45,038	136,214	145,000	(18,050)	-11.07%
31200	Maintenance & Support Services	128,800	80,885	142,650	207,100	78,300	60.79%
31250	Software Purchases	33,200	6,469	15,938	28,000	(5,200)	-15.66%
	Subtotal	$ 392,950	$ 166,855	$ 372,510	$ 447,100	$ 54,150	13.78%
33000	***Supplies***						
33100	Office Supplies	$ 28,300	$ 12,284	$ 24,568	$ 25,500	$ (2,800)	-9.89%
33150	Subscriptions/Reference Material	4,950	2,747	5,494	4,790	(160)	-3.23%
33350	Postage & Delivery	13,795	6,081	12,162	11,870	(1,925)	-13.95%
	Subtotal	$ 47,045	$ 21,112	$ 42,224	$ 42,160	$ (4,885)	-10.38%
41000	***Operation & Maintenance***						
41100	Building & Grounds	$ 337,200	$ 181,849	$ 363,698	$ 372,150	$ 34,950	10.36%
41150	Building & Land Lease	130,400	103,294	106,588	205,700	75,300	57.75%
41200	Pump Station Maintenance	105,000	66,461	132,922	-	(105,000)	-100.00%
41300	Dam Maintenance	102,000	39,407	78,814	115,440	13,440	13.18%
41350	Pipeline/Appurtenances	268,210	483,727	647,294	267,255	(955)	-0.36%
41400	Materials, Supplies & Tools	190,450	94,549	195,916	164,050	(26,400)	-13.86%
41450	Chemicals	2,263,150	979,136	2,111,182	2,067,600	(195,550)	-8.64%
41500	Vehicle Maintenance	74,600	26,162	52,324	68,850	(5,750)	-7.71%
41550	Equipment Repair, Replace, Maint.	741,000	469,019	992,294	842,900	101,900	13.75%

Rivanna Water and Sewer Authority
Fiscal Year 2021-2022 Proposed Budget
Expense Detail

Authority as a Whole

Object Code	Line Item	Adopted Budget FY 2020-2021	Current Year Activity: Six Month Actual 12/31/2020	Current Year Activity: Projected Year end 6/30/2021	Proposed Budget FY 2021-2022	2021 vs. 2022 Variance $	2021 vs. 2022 Variance %
41600	Instrumentation	419,840	71,444	277,888	482,640	62,800	14.96%
41650	Fuel & Lubricants	96,450	41,031	82,062	88,050	(8,400)	-8.71%
41700	General Other Maintenance	190,116	99,042	418,084	189,600	(516)	-0.27%
	Subtotal	$ 4,918,416	$ 2,655,121	$ 5,459,066	$ 4,864,235	$ (54,181)	-1.10%
81000	***Equipment Purchases***						
81200	Rental & Leases	$ 78,250	$ 19,001	$ 38,002	$ 77,350	$ (900)	-1.15%
81250	Equipment (over $10,000)	35,000	-	15,000	297,000	262,000	748.57%
81300	Vehicle Replacement Fund	239,000	119,500	239,000	240,900	1,900	0.79%
	Subtotal	$ 352,250	$ 138,501	$ 292,002	$ 615,250	$ 263,000	74.66%
95000	***Allocations from Departments***						
95100	Administrative Allocation	$ -	$ -	$ -	$ -	$ -	
95300	Engineering Allocation	-	-	-	-	-	
95150	Maintenance Allocation	-	-	-	-	-	
95200	Laboratory Allocation	-	-	-	-	-	
	Subtotal	$ -	$ -	$ -	$ -	$ -	
	Depreciation	$ 860,000	$ 430,000	$ 860,000	$ 900,000	$ 40,000	4.65%
	Subtotal	$ 860,000	$ 430,000	$ 860,000	$ 900,000	$ 40,000	4.65%
	Total	**$ 19,384,418**	**$ 10,059,251**	**$ 20,343,341**	**$ 20,533,593**	**$ 1,149,175**	**5.93%**

Audit Check	
Less revenue allocation in Admin.	(553,000)
Less revenue allocation in Maint.	-
Less revenue allocation in Eng.	-
Detail Check on Expenses	$ 19,980,593
Total Summary Sheet Rate Center Only	$ 19,980,590

RWSA Staffing by Department

OPERATIONS	*Approved Positions FY 2021*	*Changes*	*Positions FY 2022*
Engineering & Maintenance			
Director of Engineering & Maintenance	1		1
Engineering Department			
Engineering Manager	1		1
Asset Management Coordinator	0	1	1
Senior Civil, Civil Engineers	5		5
Water Resources Manager	1		1
Engineering Technician/Inspector	4		4
Administrative Office Technician	1		1
(Director FTE included) Subtotal	13	1	14
Maintenance Department			
Maintenance Manager	1		1
Asst. Maintenance Manager	1		1
Mechanics	10		10
Industrial Controls/Instrumentation Specialist	1		1
Vehicle Equipment Mechanic	1		1
Mechanic Helper	1		1
Maintenance Workers	1		1
Subtotal	16		16
Operations			
Director of Operations	1		1
Laboratory			
Laboratory Manager	1		1
Chemist	3		3
Subtotal	4		4
Wastewater Department			
Wastewater Manager	1		1
Wastewater Assistant Manager	1		1
Treatment Supervisor	1		1
Plant Operators (14 total)			
Operators - Relief Shift Differential all plants	2		2
Operators - Urban	9		9
Operator - Glenmore	1		1
Operator - Scottsville	1		1
Subtotal	16		16
Water Department			
Water Manager	1		1
Water Assistant Manager	1		1
Water Quality Specialist	1		1
Water Treatment Plant Supervisor	2		2
Plant Operators			

RWSA Staffing by Department

OPERATIONS	***Approved Positions FY 2021***	***Changes***	***Positions FY 2022***
Operators - Relief Shift Differential all plants	3		3
Operators - Urban	14.4		14.4
Operators - Crozet	2.6		2.6
Operators - Scottsville	1.4		1.4
Subtotal	26.4	0	26.4
Subtotal	76.4	1	77.4

				FTE Split		
Joint Administrative Staff				RWSA	SWA	
Executive Director	1		1	0.85	0.15	1.00
Communications Manager/Executive Coordinator	1		1	0.60	0.40	1.00
Director of Finance & Administration	1		1	0.80	0.20	1.00
Office/HR Manager	1		1	0.80	0.20	1.00
Senior Accountant	1		1	0.80	0.20	1.00
Accounting Associate	0	1	1	0.90	0.10	1.00
Payroll & Benefits Coordinator	1		1	0.75	0.25	1.00
Accounts Payable/Purchasing Technician	1		1	0.75	0.25	1.00
Accounts Receivable Technician	1		1	0.30	0.70	1.00
Administrative Assistant	1		1	0.75	0.25	1.00
Administrative Office Technician	1		1	0.70	0.30	1.00
Safety Manager	1		1	0.70	0.30	1.00
IT/SCADA						
Information Systems Administrator	1		1	0.60	0.40	1.00
Information Systems Asst. Administrator	1		1	0.60	0.40	1.00
GIS Coordinator	1		1	1.00	0.00	1.00
Software Analyst	1		1	0.80	0.20	1.00
IT Specialist - SCADA	1		1	1.00	0.00	1.00
IT Administrator	0	1	1	1.00	0.00	1.00
SCADA Technician	1		1	1.00	0.00	1.00
Administration and allocation with RSWA	17	2	19	14.70	4.30	19.00
Total all positions	93.40	3.00	96.40			
FTE Position Allocated to RSWA	-4.20		-4.30			
Total Adjusted FTEs	89.20		92.10			

Data for ACSA

	FY 2021	FY 2022	Change
Total RWSA Expenses			
Water	$ 18,326,000	$ 19,739,000	$ 1,413,000
Wastewater	18,242,000	18,661,000	419,000
Add Administration revenue allocation	545,000	553,000	8,000
Add Maintenance revenue allocation	-	-	-
Add Engineering revenue allocation	-	-	-
			-
Total	$ 37,113,000	$ 38,953,000	$ 1,840,000

RWSA Rate Charges Allocated to ACSA, by Service Area

Water			
Urban	$ 7,343,723	$ 8,732,941	$ 1,389,218
Crozet	2,340,120	2,906,688	566,568
Scottsville	649,561	653,592	4,031
Total	$ 10,333,404	$ 12,293,221	$ 1,959,817
Wastewater			
Urban	$ 7,435,218	$ 8,060,138	$ 624,920
Scottsville	318,430	336,150	17,720
Stone Robinson School	22,788	30,589	7,801
Glenmore	374,302	411,440	37,138
			-
Total	$ 8,150,738	$ 8,838,317	$ 687,579
Total for ACSA	**$ 18,484,142**	**$ 21,131,538**	**$ 2,647,396**