Albemarle County Service Authority
Serving Conserving

BOARD OF DIRECTORS' MEETING

May 16, 2024
9:00 A.M.

AGENDA

This meeting is being held pursuant to and in compliance with Va. Code Section 2.2-3708(3). The ACSA Board of Directors is responsible for receiving public comment. The opportunities for the public to access and participate in the electronic meeting are as follows: Join the meeting virtually through Zoom by visiting our website at www.serviceauthority.org; call in and leave a message prior to the meeting at (434) 977-4511, or email the Board prior to the meeting at board@serviceauthority.org.

9:00 a.m.	**1.** Call to Order and Establish a Quorum –Statement of the Board Chair
9:05 a.m.	**2.** Employee Recognitions –Elizabeth Wallace – 25 Years of Service
9:10 a.m.	**3.** Approve Minutes of April 18, 2024
9:15 a.m.	**4.** Matters from the Public
9:25 a.m.	**5.** Response to Public Comment
9:30 a.m.	**6.** Consent Agenda
	a. Monthly Financial Reports
	b. Monthly Capital Improvement Program (CIP) Report
	c. CIP Authorizations
	d. Monthly Maintenance Update
	e. Rivanna Water and Sewer Authority (RWSA) Monthly Update
	f. ACSA Board Policy Issues Agenda 2024
	g. Annual Water Quality Report
9:45 a.m.	**7.** Proposed FY 2025 Budget and Rates Workshop – Power Point Presentation
10:25 a.m.	**8.** Advanced Metering Infrastructure (AMI) Project Completion Report
10:45 a.m.	**9.** Items Not on the Agenda
10:50 a.m.	**10.** Executive Session – Personnel Matters
	11. Adjourn

ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF CHAIR TO OPEN MAY 16, 2024 MEETING

This meeting today is being held pursuant to and in compliance with Va. Code Section 2.2-3708.3.

The opportunities for the public to access and participate in the electronic meeting are posted on the ACSA's website. Participation will include the opportunity to comment on those matters for which comments from the public will be received.

R E S O L U T I O N

***WHEREAS** Elizabeth "Liz" Wallace began her career on April 1, 1999, and has served the Albemarle County Service Authority for*

2 5 Y E A R S; and

***WHEREAS** her efforts and service to the Albemarle County Service Authority, in the Customer Service department, have contributed to the reliability of the public water and sewer systems in Albemarle County; and*

***WHEREAS** her ability and willingness to collaborate with other departments has been integral in the success of numerous projects and special events, as well as the continuity of business and operations of the ACSA; and*

***WHEREAS** the Albemarle County Service Authority, its customers, and employees have greatly benefited from her extensive knowledge, experience, dedication, and leadership; and*

***WHEREAS** the Board of Directors of this Authority believes that such recognition should be publicly made;*

***NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors of the Albemarle County Service Authority expresses its sincere gratitude to*
Elizabeth "Liz" Wallace
for her service to the customers of the
Albemarle County Service Authority.

* *

I hereby certify the foregoing to be a true and exact copy of a resolution adopted by the Board of Directors of the Albemarle County Service Authority in a regularly scheduled meeting held May 16, 2024, by a vote of __ to __.

_____

Gary B. O'Connell, Secretary-Treasurer

Albemarle County Service Authority Board of Directors

The Board of Directors of the Albemarle County Service Authority (ACSA) met in a regular session on April 18, 2024, at 9:00 a.m. at the Administration and Operations Center at 168 Spotnap Road in Charlottesville, Virginia.

Members Present: Mr. Richard Armstrong; Ms. Lizbeth Palmer; Mr. John Parcells; Mr. Clarence Roberts; Ms. Kimberly Swanson; Mr. Charles Tolbert, Vice-Chair.

Members Absent: None.

Staff Present: Deanna Davenport, Mike Derdeyn, Deborah Herr, Terri Knight, Quin Lunsford, Jeremy Lynn, Alex Morrison, Gary O'Connell, Emily Roach, Sabrina Seay, Danielle Trent, April Walker.

Staff Absent: None.

Public Present: Neil Williamson, President and Executive Director, Free Enterprise Forum.

1. Call to Order and Establish a Quorum – Statement of Board Chair

The Chair called the meeting to order. He then read the opening Board Chair statement (Attached as Page _____), and a quorum was established. He announced that today was a special day, as they are celebrating the ACSA's 60th anniversary.

2. Recognitions – Employee Management & Supervisory Leadership Training – Maintenance; ACSA 60th Anniversary Tribute

Alex Morrison came forward to give the first recognition. He stated that as part of the ACSA's Strategic Plan, there is a focus on the employee experience which includes training and education programs. He stated that the programs help employees, as well as the ACSA in its mission and vision. He stated that there were seven maintenance employees that participated in training for management and supervisory leadership through the Public Utilities and Waterworks Management Institute. He mentioned that five employees went through the basic training – Marshall Via, Jonathan Caylor,

Raymond Mason, Tyler Snoddy, and Jayden Damron. He noted that the other two employees, Jeff Sprouse and Jake Duff, went through the advanced training. He added that the total class time was about 18 hours over a course of three weeks.

Mr. O'Connell stated that the next recognition was a surprise that just happened over the last day or so, which Quin Lunsford would share with the Board. Mr. Lunsford stated that as of yesterday around lunch time, the AMI installations are 100% complete. He stated that there are now 22,990 meters communicating with the office four times a day. He mentioned that the staff is very proud of the team that made this happen, as well as the support of the ACSA Board as it was truly an organizational effort. He noted that there will be a comprehensive overview of the project at the May Board meeting.

Mr. O'Connell stated that the last recognition is in honor of the ACSA's 60th anniversary. He stated that the staff was looking for an interesting way to celebrate and decided to share some of the fun and talent that is found within the organization, that the Board does not normally see. He stated that Ms. Trent has created a song that she is going to present to the Board. Ms. Roach added that Ms. Trent wrote the song herself, which they would now play.

Ms. Palmer stated that Ms. Trent is very talented and the song should be on the ACSA website. The Board concurred that they enjoyed the song.

3. Approve Minutes of March 21, 2024

Mr. Roberts stated that he had one comment on page 2. He stated that Ms. Swanson's first name needs to be added where the Board members present are listed. There were no further corrections or additions to the minutes of March 21, 2024.

Mr. Parcells stated that he had a question on page 16, around line 27. He stated that Mr. Lynn mentioned that the ACSA had fallen into a "bad habit" of completing some sewer projects piecemeal. He stated that he wanted to affirm that the ACSA is out of that bad habit and completing them

better. Mr. Lynn replied that he will find out by how the Board responds to the Buckingham Circle project. He stated that when he made that comment, he was specifically referring to the Northfields subdivision, which is very big. He mentioned that the ACSA has installed four different phases of sewer in that neighborhood over the last 20+ years and they are still not finished. He noted that phase 5 is included in the CIP presentation today, which will still not get them to the finish line. He noted that the challenging part for the ACSA, and the Board, is whether or not to push projects forward for the benefit of the entire community regardless of whether people are going to connect or not. He added that he would like to say yes, the ACSA is moving away from those bad habits.

Ms. Palmer asked if those bad habits cost more in the long run. Mr. Lynn replied that he thinks with the Buckingham project, they will see that it would have been cheaper to do the sewer when they did the water main replacement project, from a construction standpoint. He stated, however, if property owners and customers do not want the sewer then the Board will be faced with condemnation potential. He stated that the Board has to decide if they want to possibly condemn a few properties to push the project through for future customers or not. Ms. Palmer asked if by condemn, Mr. Lynn means in terms of the easement. Mr. Lynn replied yes.

Mr. Roberts stated that he remembers there being a lot of opposition when the ACSA did the Buckingham Circle project. He asked if the ACSA could handle the situation with the sewer project in the same manner they did with the water project. Mr. Lynn replied that he feels there is more support for the sewer project now than there was 15 years ago. He noted that the ACSA is looking into some funding to help offset some of the costs and making it palatable to the community.

Ms. Palmer asked if they get into a situation where they have to force the issue, would it be helpful to know about contamination in Morey Creek. Mr. Lynn replied that he thinks it would be helpful to know but does not know if that will convince an individual property owner or be the deciding factor in

them granting the ACSA an easement. He stated that the ACSA has spoken with VDH and they do not have any funding for the project, but they know the situation in Buckingham Circle and are advocating for those residents to connect to public sewer.

Ms. Swanson asked if the opposition to the sewer project came before the water line project was finished and residents did not have a good sense of how the water project would go. Mr. Lynn replied that the decision to halt the sewer project was made before the water line was installed. He noted that initially, the two were going to be a joint project with one contractor performing all of the work. He mentioned, however, that they stopped the sewer project once they received the survey results and saw that there was not a lot of support for it. He added that there were never follow-up conversations with the community after the water project was completed. Ms. Swanson stated that the customers might be more accommodating with respect to the sewer project after seeing how well the water project went.

Mr. Parcells stated that there is a cost risk for the customer, in terms of who is willing to bear the cost now versus holding off until it is necessary. He stated that he assumes, since the ACSA tried for a CDBG grant and could not get it, that the customers in this area are above the required salary range. He noted that this does not mean that it will not be expensive for them. Ms. Palmer stated that she remembers a number of the properties in this neighborhood were rental properties, but she is not sure about now.

Mr. Tolbert moved to approve the minutes of March 21, 2024, seconded by Mr. Parcells. All members voted aye.

4. Matters from the Public

There were no matters from the public.

5. Response to Public Comment

There was no response to public comment.

6. Consent Agenda

A. Monthly Financial Reports – Mr. Parcells stated that he had a comment about the high flow leak mentioned on page 26. He stated that the graph shows a leak for 20 hours at 9,000 gallons per hour which is 180,000 gallons. He asked how the ACSA covers this cost. Mr. Lunsford replied that the customer is responsible for the cost. He stated that this was a unique situation, but the ability to identify it within hours instead of weeks was crucial. He noted that the customer was not aware of the issue because the leak had not surfaced yet. Mr. Parcells stated that interestingly, the description says that RWSA noticed a drop in pressure and contacted the ACSA, at the same time the ACSA noticed it.

Mr. Lunsford stated that this service serves two sinks, thus the water is not used regularly. Ms. Palmer asked if the use was residential. Mr. Lunsford replied no. Mr. Parcells stated that this reflects very well on the AMI system. Mr. Lunsford stated that the major flow alarms have been incredibly helpful to identify issues very quickly before they become major issues.

Mr. Parcells asked if Mr. Lunsford could remind him of the difference between unearned connection fees and system connection charges on pages 27 and 28, respectively. Mr. Lunsford replied that they are, in essence, the same thing. He stated that when a developer pays in advance of the actual connection, it is a liability on the ACSA's books. He mentioned that once the contractor performs all of the responsibilities to be connected, they will then debit that liability and credit the revenue on page 28.

Mr. Parcells asked if the $6.5 million on page 28 is revenue that was obtained from the developers, and the $3 million on page 27 is the liability subtracted from that. Mr. Lunsford replied that the $6.5 million does not include the $2 million. He stated that when the revenue cycle is complete, that $2 million leaves page 27 and is added to the $6.5 million. Mr. Parcells stated that it was still not clear to him. Mr. Lunsford stated, for example, if the developer decided not to build anything else,

the ACSA would have to return that $2 million. He noted that the ACSA does not record it as revenue until the developer is ready for connection. Mr. O'Connell added that the ACSA has had builders that pay connection fees and then decided not to build, and the ACSA had to refund their fee.

Mr. Parcells asked a related question about the connection fee analysis on page 33. He noted that YTD connection fee total for FY 2024 and asked if the amount shows $5.6 million because it is not totaled up through March. Mr. Lunsford stated that this is correct. He stated that there is a certain timing required to get the information ready for the Board packets. He noted that next month's Board packet will show $6.5 million.

b. Monthly Capital Improvement Program (CIP) Report – Mr. Parcells referenced the Energy Audit on page 71. He asked how the staff is charging the electric vehicle, given that they still have some work to do for the charging station. Mr. Morrison replied that when the electric vehicle was purchased, the staff was aware that the charging infrastructure might be delayed beyond the vehicle delivery. He stated that the ACSA purchased a portable charging unit with the vehicle and a 240-volt connection was installed on the outside of the fueling building to charge the vehicle. He mentioned that the vehicle is about 80% charged at the end of the workday and is fully charged again around midnight. He noted that the main distribution panel for the charging station was received Monday.

Mr. Parcells mentioned that he saw plans for another electric vehicle in the budget, and asked if the charging station would be ready by the time the second vehicle arrives. Mr. Morrison replied yes. Mr. Parcells asked if there were plans for more electric vehicles, or if they would assess how things are going before making the decision to convert. Mr. Lynn replied that there are actually two electric vehicles in the budget, one for engineering and one for IT. Mr. O'Connell added that the idea is

that when a vehicle comes up for replacement, the staff will consider replacing it with an electric vehicle.

Ms. Palmer asked how many miles the vehicles get on one charge. Mr. Morrison stated that the current electric vehicle is a 2024 Ford Lightning and with a standard battery, it averages 240 miles per charge.

Mr. Parcells moved to page 72, referencing the update to the Avon Operations Center project. He stated that the two bids were $5 million over the budget which he assumes was a shock, and asked why they were so high. Mr. Lynn replied that it was a shock that they were so much over budget. He noted that the two bids were only within a couple hundred thousand dollars of each other. He mentioned that during the bid period, they heard a big concern from contractors about the presence of rock on the site. He stated that the way the bid the project, rock was the contractor's risk thus they had to build that cost into their pricing. He stated that the staff decided to work with Dewberry and Schnabel to gather additional rock information, and that proposal for additional geotechnical work will probably be before the Board next month. He added that they believe this will give them a better idea of what is at the site, after which they will go to a unit price for rock removal. He stated that the risk will then be on the ACSA, but the hope is that it will bring the price down some. He stated that they are also looking at a couple of other items that Dewberry has identified, to see if they can be pulled or delayed.

Ms. Palmer asked if there had been any boring or anything done to look at how much rock is on the site. Mr. Lynn replied that there were some limited borings on the site, but they want to do some seismic refraction to get an understanding of the density of the rock and see what can be ripped and what might need to be blasted. He added that both contractors understand that their bids have been rejected and the ACSA will readvertise. Mr. Parcells asked how long it will take before the geotechnical information will be obtained. Mr. Morrison stated that once

they get on site, there will be two days' worth of data collection for 1600 linear feet of seismic refraction. He stated that this data will then be analyzed by Dewberry, which will take 1-2 weeks. He noted that this will give them the ability to quantify the rock and classify it to get a unit price. He added that in conjunction with this, the ACSA staff will work with Dewberry to revise the bid documents for the items that can be additive or alternative items, instead of a single lump sum bid. He stated that it will probably be early to mid-summer when they rebid, and it may be a shorter bid time.

Mr. Parcells moved to the Four-Story Backflow Prevention Assembly Retrofit project and expressed his joy for the completion of the project. Mr. Lynn replied, unfortunately, they were notified earlier this week that the plumber completing the last installation had to reschedule. He stated that it is now scheduled for April 23rd, so they can save their excitement for next month.

Ms. Palmer asked about the Ragged Mountain Phase 1 Water Main Replacement project, and what the 12" pipe that will go under Route 29 will serve. Mr. Lynn replied that it currently serves the Trinity Presbyterian Church and about 10-12 homes along Reservoir Road. He noted that it will also serve the Regents School. He mentioned that the goal is to eventually connect Buckingham Circle, which provides some redundancy. Ms. Palmer stated that there has been discussion for years about what to do with the commercially zoned property just south of 64. She asked if this project would affect any future plans with that property. Mr. Lynn replied that the current water line runs through that site, but it is very deep. He mentioned that a few of the alternatives negatively impacted that property, but the current approach will not and the property will continue to have service. Ms. Palmer stated that the property does not currently have service. She stated that she was referring to the property where the brewery was going to go, south of Interstate 64. Mr. Lynn stated that this project will not affect that property

at all. He stated that the developer of that site will still need to provide a water line to their site and under Route 29 to provide water and sewer for that property.

c. CIP Authorizations – Mr. Parcells stated that he had a comment about a minor detail on page 92. He stated that on the attachment, there is talk about two plats and three plats. He stated that the $6,615 is quoted for three plats, but two plats are mentioned in several places. Mr. Lynn replied that the earlier draft had two plats, but a third one was added. He noted that Kimley-Horn probably changed the pricing but did not change the text to reflect that change. He noted that the ACSA only pays for the ones they need, so if they only need two then they will pay for two.

Mr. Parcells asked if the trenchless application to install the pipe means that there will be boring under Route 29. Mr. Lynn replied that it will be a jack and bore. He noted that RWSA has a jack and bore right next to the ACSA's which is a 36" pipe, while the ACSA's is only a 12" pipe. He stated that the equipment to do a much larger bore will already be in place, which will present some cost savings for the ACSA with a single mobilization for the contractor.

d. Monthly Maintenance Update – Mr. Parcells stated that the water main break on Earlysville Road noted on page 110 was a big break. He stated that it was a PVC main, thus he is sure the ACSA is glad that it will ultimately be replaced. Mr. Morrison replied that this area has not been problematic in the past and is the first major break along this section of PVC. He stated that it has not been added to a replacement schedule and for a while, the plan was to eliminate it with construction of the western bypass. He mentioned that when VDOT removed that bypass project, the water main remained in the system. He stated that right now, they are going to monitor the water main and see if there are additional breaks. He stated that this will determine if it gets added to the CIP for replacement as a higher priority item, or if it remains a lower priority item to be replaced after they move through the high priority items.

Mr. Parcells stated that he assumes this main does not have the same iron saddle connections that have been plaguing the system elsewhere. Mr. Lynn replied that there likely are pipe saddles out there that need to be evaluated. He stated that with the pipe saddle project, they try to weigh the cost of solely replacing the pipe saddle versus a full pipe replacement. He mentioned that in some areas, the decision was made to just replace the saddles as the pipe is in good shape. He noted that this might be an area where a saddle replacement might make more sense, as the lots are bigger so the number of connections per foot of pipe is small.

e. Rivanna Water and Sewer Authority (RWSA) Monthly Update – Mr. Roberts stated that he had a question about the Rivanna Pump Station flooding update on page 116. He noted that it states insurance will likely cover half of the estimated $20-$25 million and asked how the other half will be paid. Mr. O'Connell stated that RWSA probably will not know the exact cost until June, but the latest number was $22 million. He stated that the RWSA Board will have to make a choice about reducing or delaying other capital projects, using reserves, and/or debt financing.

Ms. Palmer asked if the insurance company is only paying half because that is what the policy stipulates or was there some differential diagnosis that led them to say they are only paying half the cost. Mr. O'Connell replied that he did not know. He stated that once RWSA gets down to specific items, that amount could be more or less. Ms. Palmer stated that she assumes, since the cost is so unknown, that it has not been worked into the RWSA budget. Mr. O'Connell stated that he knows if the cost not covered by insurance is completely debt-funded, it would probably raise the rate about .05% a year, for the life of the bond.

Mr. Tolbert asked if anyone has suggested a cause for the flooding yet. Mr. O'Connell replied that he thinks RWSA has a cause, but they are trying to come to an agreement with the engineers and the insurance company, which is a bit of a negotiation. He stated that he does not know

if it was one cause or multiple causes. He mentioned that the flooding is what caused all the damage, but he does not know what caused the flooding.

Ms. Palmer asked if the original design engineers, Hazen and Sawyer, are involved in any way. Mr. O'Connell replied that he did not know, but RWSA hired a third-party engineer that has no association with the original project to evaluate the design and what happened. He stated that there will be three engineers' opinions, and it is unlikely that they will all be the same. He noted that RWSA has an item on their Board meeting agenda, authority for the bond issuance if they go that route, but they will not have any answers until June or July.

f. ACSA Board Policy Future Issues Agenda 2024 –

g. National Drinking Water Week –

Mr. Parcells moved to approve the consent agenda, seconded by Ms. Palmer. All members voted aye.

7. Proposed FY 2025 Budget and Rates – Overview Presentation

Mr. Lunsford stated that today's presentation (Attached as Pages_____) is an introduction to the budget, with next month's workshop providing a deeper dive. He stated that today, he would highlight the strategic focus of the budget, provide an overview of revenue and expense expectations, outline the proposed rates, and talk about what he will discuss during next month's workshop.

Mr. Lunsford stated that the next slide shows a graphic of the ACSA's 5-Year Strategic Plan, which contains four main pillars – data optimization, business resilience, customer experience, and the employee experience. He stated that throughout the budget document, several areas reference and focus on the 5-Year Strategic Plan.

Mr. Lunsford sated that the next slide is incredibly conceptual and illustrates departmental collaboration, and how the Strategic Plan fits into that. He noted that, as in the past, each department has taken an active role

in the development of their respective budgets. He mentioned that what has changed is the interaction between the groups, to be more interactive and intentional in how the budget is prepared. He added that this graphic is an attempt to show the “sweet spot” in the middle where both customer and employee needs are met.

Mr. Lunsford moved to the next slide, which illustrated the FY 2025 budgeted revenues and use of revenues. He stated that the ACSA expects to collect a little over $40 million in water and sewer charges, and about $1 million in system connection charges which is comparable to FY 2024. He mentioned that about $2.8 million is projected in other revenues. He noted that the ACSA intends to use $9.3 million in reserves, $6.5 million of which is from rate stabilization reserves to offset operating increases the ACSA is absorbing on behalf of its customers.

Mr. Lunsford stated that the next slide shows a familiar graphic illustrating budgeted expenses and capital costs for FY 2025. He stated that nearly $32 million will be paid to RWSA, which is about a 14% increase in charges from FY 2024. He noted that the ACSA expects similar increases for at least the next four to five years. He mentioned that the next largest component of the budgeted expenses is the ACSA’s CIP, which Mr. Lynn will speak to later. He stated that there will be some specific departmental budget information next month to help illustrate how the Strategic Plan aligns with those departmental initiatives and where those dollars are going.

Mr. Lunsford stated that the Proposed FY 2025 water and sewer rate schedule is shown on the next slide. He stated that ACSA Board is being asked to consider a 7% increase for water and sewer service charges, which is essentially half of the increase from RWSA to the ACSA. He stated that in addition to the proposed changes shown on the rate schedule, the inspection fees for water and sewer line installations have also been adjusted to recoup some CCTV work being done. He added that there will also be a $2 increase for irrigation plan review.

Mr. Lunsford moved to the next slide which briefly summarized the CIP program, which Mr. Lynn would discuss in detail. He noted that it is substantial but reasonably consistent with past years.

Mr. Lunsford stated noted the areas of focus for the May 16th budget workshop outlined on the next slide. He stated that he would dive deeper into the revenue and expense expectations, as well as take a comprehensive look at the charges from RWSA and how their CIP is driving those rates. He mentioned that he would also speak in more depth about the use of rate stabilization and growth reserves, and ACSA departmental initiatives.

Mr. Lunsford stated that in terms of next steps, the budget workshop will be next month, followed by a second workshop and public hearing at the June meeting. He stated that the Board will also be asked to adopt the budget and rates which, if adopted, would be effective July 1, 2024.

Mr. Parcells referred to the Proposed FY 2025 operating budget detail on page 179. He asked if the category "Personal Services" should read "Personnel Services." Mr. Lunsford replied that it could be, but it has been "Personal Services" for a long time. Mr. O'Connell added that the wording is what the auditors suggested.

8. Resolution scheduling Budget and Rates Public Hearing for June 20, 2024

Ms. Palmer moved to adopt a resolution that sets June 20, 2024 as the date for a Public Hearing on the Proposed FY 2025 budget and the preliminary schedule fixing and classifying such rates, fees, and charges for the ACSA, and authorizing the advertising of the Public Hearing; seconded by Mr. Tolbert. The Chair asked for a roll-call vote: Mr. Parcells, aye; Ms. Palmer, aye; Mr. Tolbert, aye; Mr. Armstrong, aye; Mr. Roberts, aye; Ms. Swanson, aye.

9. FY 2025 Proposed Capital Improvement Program (CIP) Presentation Public Hearing

Mr. Lynn stated that he first wanted to acknowledge the ACSA's CIP team, as putting the CIP program together takes a lot of time and energy and it is a great program. He noted that the first slide gives an illustration of the FY 2025 CIP budget, which totals $12.1 million. He noted that the two pie charts show a breakdown of the CIP program between water, sewer, and non-utility projects, as well as new and existing projects. He noted that the vast majority of CIP projects this fiscal year are existing projects.

Mr. Lynn moved to the next slide, which showed a bar graph of the CIP 10-year rate model projections. He stated that they quickly added some dollars to FY 2026 due to the Avon Operations Center, as that number was not at $20 million a few weeks ago. Mr. Parcells asked if that was due to the extra $5 million from the bids. Mr. Lynn replied yes and stated that he would speak about that a bit later.

Mr. Lynn stated that he has 25 projects to go over today, beginning with the water projects. He stated that the first water project is the Crozet Phase 4 Water Main Replacement Project. He stated that the intention of this project is to replace asbestos-cement and older PVC water mains. He mentioned that construction is underway along Hillsboro Lane, and the budget for FY 2025 is $3.2 million. He noted that each project slide shows a total budget number as well, but he will focus on the budget number solely for FY 2025.

Mr. Parcells asked how many miles this is. Mr. Lynn replied about three to four miles. He stated that the contractor wants to mobilize another crew, which will expedite construction. Mr. Parcells asked about night work. Mr. Lynn stated that everything has been day work thus far, and there have only been preliminary discussions with VDOT about night work. He noted that any work in the pavement along Route 250 will have to be night work.

Mr. Lynn moved to the Scottsville Phase 4 Water Main Replacement project. He stated that the goal of this project is to replace cast-iron and

asbestos-cement water mains, as well as some aging asbestos-cement pipe that is owned by RWSA. He stated that a lot of the project has been coordinating with RWSA, and the ACSA has just begun easement acquisition. He noted that $50,000 is in the FY 2025 budget, which will cover a lot of the anticipated easement acquisition costs. Mr. Parcells asked what the mileage was for this project. Mr. Lynn replied that he would have to get that information for him.

Ms. Palmer asked if the cast-iron pipes have lead joints. Mr. Lynn replied that some of the really old cast-iron pipes do, however they are on the outside and not necessarily in contact with the water. He noted that most of the challenge with cast-iron pipe is the age and the tuberculation that builds up inside, reducing the capacity of the pipe. He added that these cast-iron mains are not that old like the Ragged Mountain water main, which he would discuss next. Mr. O'Connell added that there has been extensive lead testing in this area to ensure there is none in the water and there is not.

Mr. Lynn stated that the original Ragged Mountain Phase 1 Water Main Replacement project was a coordinated effort with VDOT and their Morey Creek Bridge replacement project. He stated that after two unsuccessful bids, the ACSA went back and revised the alignment that goes under the bypass to the Fontaine Research Park. He mentioned that, coincidentally, this alignment is parallel to RWSA's raw water main, so they are now partnering with RWSA to have a section of that water main installed as part of the Ragged Mountain to Observatory WTP raw water line. He noted that RWSA anticipates bidding in August 2024, so the ACSA anticipates that construction activity will begin on some portion of the project next calendar year.

Mr. Parcells asked, if RWSA's bore is going to be 72" with a 36" pipe, why the ACSA cannot put its pipe in there as well. Mr. Lynn replied that there was some discussion about it but one is a raw water line and the other a finished water line, and VDH has not been supportive of putting them both in the same casing pipe. He stated that the other challenge would be if one

of the lines had to be removed while leaving the other in service. He noted that there is no money in the FY 2025 budget for this project, and they expect funds in next year's budget to complete construction.

Mr. Parcells noted that this is Phase 1 of the project, and asked Mr. Lynn to refresh his memory on what the other phases were. Mr. Lynn replied that Phases 2 and 3 were done first and were further down Reservoir Road. He mentioned that Phase 1 was probably the hardest, thus they completed the easier phases first.

Mr. Lynn moved next to the Northfields Water Main Replacement project. He stated that this was originally a well system that the ACSA inherited and connected to public water in the 1960's. He stated that the easement acquisition has just begun, which he will talk about some more when he goes over the Northfields Phase 5 sewer project. He noted that these projects will be constructed together by the same contractor. Mr. Parcells asked if there was any guess as to the number of miles for this project. Mr. Lynn stated that he would send Mr. Parcells a link that shows the footages for all of the projects.

Mr. Lynn stated that the Briarwood Water Main Replacement project consists of PVC pipes that have started to experience issues like pipe splitting and saddle failures. He noted that the construction schedule has actually been moved up due to recent breaks in the area. He stated that the intention is to have construction underway later in FY 2025, which would spill over into FY 2026. He added that there is $1.5 million in the FY 2025 budget for this project.

Mr. Lynn stated that the Barracks West Water Main Replacement project will replace cast iron and galvanized water mains that date back to the 1960s. He stated that another goal with this project is to improve fire protection, as there are only three or four fire hydrants serving the entire apartment complex. He mentioned that they hope to have construction underway in FY 2025 and $2.5 million is included in the budget for this project. Mr. Parcells asked when this project will go out to bid. Mr. Lynn

replied that they just learned the current owner is looking to sell the property, so they are now working with the current owner and the contract purchaser. He stated that as soon as the easement issue is resolved, the ACSA will advertise.

Mr. Lynn moved to the Townwood Water Main Replacement project. He stated that this is another project focused on replacing older PVC water mains. He mentioned that there have been three breaks in this area in the last three years, which is very disruptive to the community and costly to repair. He stated that there is no money in the FY 2025 budget and construction is slated to begin in the FY 2026-2027 timeframe. He added that the total project budget is $2.8 million.

Ms. Swanson asked if the gas lines in this community run in the roads. He referred to the map of the project and stated that the area below the section of line to be replaced is where the gas line comes in and then it bisects the neighborhood.

Mr. Lynn stated that the Broadway Street Water Main Replacement project is another one the ACSA would like to get started but there is one easement that needs to be resolved. He mentioned that construction is anticipated in FY 2025, with $250,000 in the budget. He noted that the ACSA is partnering with the County on this project. He stated that the ACSA increased the pipe size in the design to handle future economic development along this corridor, and the County will be doing some pavement marking during the pavement restoration.

Ms. Palmer asked if the County's economic development fund would be paying for any portion of the project. Mr. Lynn replied that the County will pay for the pavement portion, but the ACSA will be using growth reserves to pay for the oversizing of the pipe. Ms. Palmer stated that it would not hurt to ask the County about using economic development funds for this project to help with the costs.

Mr. Lynn moved to the next slide outlining the Raintree and Fieldbrook PVC Water Main Replacement project. He stated that the PVC

mains have started to cause issues and need to be replaced. He stated they are still very early in the design phase and it is unclear how many easements will be needed. He mentioned that construction is anticipated in the FY 2027-2028 timeframe. Ms. Swanson asked if Raintree has public sewer. Mr. Lynn replied that Raintree was a private development and it was connected to public sewer.

Mr. Lynn stated that the next project was the Exclusion Meters Replacement. He stated that in the mid-1990s, the ACSA decided to permit private exclusion meters behind the domestic meter, allowing customers to exclude that portion of their water from their sewer bill and avoid paying sewer charges on water they were using for irrigation. He mentioned that in 2006, the Board shifted away from allowing these meters and the ACSA began eliminating them from the system. He noted that there were 495 exclusion meters, and they are just over halfway complete. He stated that most of the work has been performed by ACSA maintenance crews until earlier this year when the staff decided to pay irrigation contractors to do the work. He noted that there is funding for the project that was already allocated in previous budgets, and there is nothing budgeted for FY 2025.

Ms. Palmer asked if these are total replacements. Mr. Lynn stated that when the program first began, the ACSA wanted to own everything but this approach was very disruptive and costly. He stated that with the new switchover, the ACSA will own the meter, the box, and setter, but the customer will be responsible for a section of pipe between their line and the meter. He noted that there will be an AMI meter that reads everything and an AMI meter that reads what goes to the irrigation system, and the difference is what goes to the house.

Ms. Swanson asked, as they embarked on this project, if they found customers that decided to abandon the irrigation system altogether. Mr. Lynn replied yes, but not a large number. He stated that some people feel there is a value to their property to have the irrigation system, even if they do not use

it. He noted that on the flip side, they are paying a monthly service charge for the meter as well as a fee to have the backflow device tested annually.

Mr. Lynn moved to the Pipe Saddles Replacement project, which he briefly touched on earlier. He stated that so far, replacements have been done along the five streets listed on the slide. He stated that there is no additional funding being requested in FY 2025. He mentioned that a few more areas have been identified to begin looking at for possible replacements.

Mr. Lynn stated that the Annual Water Repair and Replacement project is the last one to present on the water side. He stated that the ACSA had an authorization in last month's Board packet for a contract with Rocktown Excavating. He stated that the Notice of Award has been issued and once the contract is signed, the work will begin. He stated that the first items will be the Huntington water connection and the Lewis Hill-West Leigh interconnect. He noted that this provides support to the ACSA maintenance department and avoids the long, cumbersome design/bid/build process.

Mr. Lynn moved to the sewer projects, beginning with the Airport Trunk Sewer Upgrade project. He stated that the project is under design and he feels they have done as much as they can until there is significant progress made with easement acquisition, which has proved to be very challenging for this project. He noted that the construction has been pushed to the FY 2027-2028 timeframe, and there will be no funds incorporated into the FY 2025 budget for this project.

Ms. Swanson asked if Mr. Lynn could explain how the pipe will tie into the pump station next to Kohl's. Mr. Lynn replied that the pump she is referring to is a water pump, which allows RWSA to bring water from the South Rivanna system to the North Rivanna system. She asked if there was a sewer line near Kohl's put in for Berkmar. Mr. Lynn stated that the section under Berkmar was upgraded when the Berkmar Drive extension project was done, and that sewer extends all the way to the airport, which is what this sewer will tie into. He noted that this is the section where multiple

branches come down and the existing pipe size is not adequate to support full build-out.

Ms. Swanson asked how this project aligns with the Hollymead dam. Mr. Lynn stated that the ACSA has already obtained the easement from the County, who is supportive of this project. He mentioned that there would be a jack and bore under the dam, so they would not be cutting through the dam. Mr. Parcells asked if this is a new path. Mr. Lynn replied that most of it is replace in place or slightly parallel to the existing line. He noted that the challenge is that all of these properties are already ACSA sewer customers, and they do not see the benefit of granting the easement because they already have the service, thus it would just be a disruption.

Ms. Palmer asked if the new sewer line would serve another new development, like the one in the back of Hollymead. Mr. Lynn replied that it will serve Willow Glen Phase 2, which is a couple hundred units. He added that the Forest Springs Mobile Home Park has been sold, so there is the potential to redevelop that site and increase density over what is currently there.

Mr. Parcells asked if the service is being upgraded for more capacity and is being done in phases, when do they envision full capacity requirements. Mr. Lynn stated that this pipe section has different slopes, diameters, and lines coming into it, which means different sections of the pipe have different capacities. He stated that it is being done in pieces and if a developer needed capacity, they would have a section that they would be responsible for.

Mr. Roberts stated that he visited this area a couple of years ago and the terrain is unbelievable, with nice shrubbery and lawns. Mr. Parcells stated that he had a friend that lived in this area and they had a beautiful backyard that stretched down to the lake. He stated that he cannot imagine digging that up to put in a 36” line. Mr. Tolbert asked if the ACSA is offering any money for these easements. Mr. Lynn replied that the ACSA offers financial compensation based on the value of the land. He stated that

sometimes this is enough, and sometimes it is not. He stated that the ACSA has to be reasonable and fair, but prudent with its funds as well. Mr. Tolbert asked if the land value includes shrubs and trees. Mr. Lynn stated that those items are typically not taken into consideration when the rough calculations are done. He noted that if there is an appraisal done on the project, it usually takes into consideration things like mature trees or duration of construction. Mr. Tolbert asked if, at some point, the ACSA uses “the stick instead of the carrot.” Mr. Lynn stated that they would present a resolution to the Board for potential condemnation, but they would still try to work with the property owner.

Mr. Parcells asked if they could use an alternate route, like cutting across Amberfield Drive to some other sewer line. Mr. Lynn replied that this is a gravity line, so they have to go where the land takes them. He stated that the logical point is along the water. He mentioned that it would probably not work to cut through Amberfield and would be more disruptive to the community as a whole to pick another alignment. He added that this project is one of the bigger challenges they are currently facing in the CIP.

Mr. Lynn stated that the next slide shows the Northfields Phase 5 Sewer project. He stated that when they were doing the water main design, there were some areas identified where it made sense to have public sewer extended. He stated that this phase will serve upwards of 20 homes and construction will be coordinated with the water main replacement project, which will take place during the FY 2027-2028 timeframe. He noted that there are no funds included in the FY 2025 budget for this project. He added that the connection fees are about $8,000, which totals a fraction of the project cost. He stated that spending that type of money for a service that people are not going to use is a tough decision for the Board to make.

Mr. O’Connell stated that Northfields was an old well system and most, if not all of them, do not have sewer. Mr. Lynn stated that Carrsbrook and Buckingham Circle are both old well systems that do not have sewer. Ms. Palmer asked if Key West has public sewer. Mr. Lynn replied that Key

West is not in the ACSA's jurisdictional area for sewer, so they can only provide public water.

Mr. Lynn stated that next is the Buckingham Circle Sewer project, which is the first new project that he will be sharing this morning. He stated that he spoke about this in great detail last month. He stated that the original design for the project was done over 10 years ago in 2012, thus part of the FY 2025 CIP is to reevaluate that design and see if it makes sense. He noted that the hope is to begin easement acquisition in FY 2025 as well. He stated that $175,000 has been included in the FY 2025 budget for this project.

Ms. Swanson stated that a few years ago during the County budget townhall meeting, there was a discussion about creating a separate fund to help people connecting to sewer. She stated that, to her understanding, that fund has gone largely untapped and asked if this was something the County and the ACSA could partner on. Mr. Lynn stated that the ACSA is looking at a couple of different options. He mentioned that they have talked to VDH and while they are supportive of the project, they do not have any financial resources to share at this point. He stated that they will be talking with DEQ and the County to see if there is any way they can contribute to the project.

Ms. Palmer stated that there was a discussion when the federal government was giving out funds during COVID-19, and she thought a fund was created for that purpose. Mr. O'Connell stated that the County government set aside $1 million, with the thought that homeowners with properties close to public sewer, that are having septic problems, would take advantage of the funding. He stated that there has been very little, if any, interest, and the County has talked about reprogramming the money for something else.

Ms. Swanson stated perhaps the County can use those funds and work with the ACSA to help people connect to public sewer if the connection fees are a restraint. Mr. O'Connell noted that there is an income requirement because of the source of the funding. He stated that the ACSA's previous work in Buckingham Circle would show that the residents are not income

eligible. He added that he thinks the income requirement is part of the reason why the funds have not been utilized. Ms. Swanson stated that she thought there was more discretion at the local government level. Mr. O'Connell stated that there is not because this is, in essence, grant money. Mr. Lynn added that the ACSA has been working with Albemarle Housing Improvement Program (AHIP), and they have done about 4-5 connections total.

Mr. Lynn moved to the Bellair-Liberty Hills Sewer project. He stated that this project was started a few years ago in response to community interest. He stated that the project is currently in the design phase and they have commented on the 50% design. He stated that they plan to have a public meeting before the 90% stage. He noted that this is a challenging neighborhood given the lot sizes and topography. He mentioned that there is no money included in the FY 2025 budget for this project, and they hope the construction timeframe will be FY 2026-2027. He stated that it is unknown how many easements they will need, but if they can keep most of the utilities along the road it should minimize that number.

Ms. Palmer asked if the sewer from Bellair would be connected to Buckingham Circle. Mr. Lynn stated that RWSA has a line called the Morey Creek Interceptor that runs through the area between Buckingham Circle and the UVA property, so Buckingham Circle would connect to that line. Bellair-Liberty Hills would be connected further upstream, so they would both be connecting to RWSA lines at different locations.

Mr. Parcells asked if there was 100% community interest in Bellair-Liberty Hills. Mr. Lynn replied that there is over 50% interest but nowhere near 100%. Ms. Palmer asked if the ACSA had received the list of interested residents in Buckingham Circle from the person that was collecting information. Mr. Lynn stated that they are still in the process of doing the survey to send out to the residents.

Mr. Lynn stated that the Woodbrook Drainage Basin SSES project shown on the next slide is the second new project in the CIP. He stated that

this project is a sewer evaluation survey to identify defects in the sewer system and sources of inflow and infiltration (I&I). He stated that the survey consists of manhole inspections, flow metering, smoke testing, and CCTV inspections. He mentioned that $400,000 has been included in the FY 2025 budget for this project. He noted that depending on what defects are found, any leftover money will be used to correct them. He stated that if there are a lot of issues that need to be addressed, they may have to ask the Board for additional funding.

Mr. Lynn stated that the last sewer project is the Miscellaneous Sewer Rehabilitation project. He stated that every year, money is included in the CIP budget to handle sewer issues discovered through the ACSA's find and fix program. He stated that there are two in-house CCTV crews out on a regular basis, and this contract allows the ACSA to issue work orders for any issues they find and take care of them in a timely manner.

Mr. Lynn stated that he would now move on to the non-utility/facilities projects. He stated that the first one is the Pump Stations – Rehabilitation project. He stated that this is the second year for this rehab project, and the ACSA Facilities group has done an excellent job of identifying needs over the next 10-year period. He stated that the needs for FY 2025 amount to $205,000. He stated that for FY 2025, they envision a third pump at Glenmore and either a pump replacement or rebuild at the North Fork Regional Pump Station, Ashcroft Pump Station No. 3, and Mill Creek Pump Station.

Mr. Lynn moved to the next slide, outlining the Customer Information System project, also known as CIS. He noted that this project is part of the ACSA's 5-Year Strategic Plan, under the pillar of customer experience. He stated that the three main components of this project are the billing system replacement, website redesign, and phone system replacement. He noted that there is an RFP out right now for the phone system replacement, with hopes of receiving those proposals in early May and having a new system

in place later this year. He added that $800,000 has been included in the FY 2025 budget, to be split between water and sewer.

Mr. Lynn stated that the ESRI Utility Network Implementation is the next project. He stated that Timmon's Group has finished the evaluation and are recommending that the ACSA make the shift towards the utility network. He mentioned, however, that they have identified some data cleanup that needs to happen before that conversion. He noted that much of FY 2025 will be in-house work to prepare for that transition.

Mr. Lynn moved on to the Avon Operations Center, which he noted is clearly a 5-Year Strategic Plan item under the pillar of business resilience. He stated that the ACSA will lose its storage space at the Crozet filter plant as RWSA embarks on its GAC expansion. He mentioned that, unfortunately, the ACSA received some difficult news a few weeks ago when the bids came in about $5 million more than what was anticipated. He stated that rock plays a big part in that cost, but it is not the only factor. He stated, as Mr. Morrison mentioned earlier, that they will try to identify some alternative bid items to do some value engineering. He noted that the FY 2025 budget amount remains unchanged, but they did add $5 million as a placeholder in FY 2026.

Mr. Lynn stated that the Records Management project is another strategic initiative. He stated that the ACSA has rooms bursting at the seams with paper documents and needs a document management solution in place to scan, file, and easily search for documents. He mentioned that $50,000 has been included in FY 2025, and that money will be split between water and sewer.

Mr. Lynn stated that the third new project in the CIP is the ACSA Operations Center Improvements. He stated that the ACSA Facilities group has identified two projects they would like to embark on in FY 2025. He stated that one is to address the settlement at the front door of the Operations Center, and the other is to install a hard deck on the underside of the truss system in the ACSA Warehouse. He noted that $50,000 has been included in the FY 2025 to complete those projects.

Mr. Lynn stated that last, but certainly not least, is the Developer Participation project. He stated that if the ACSA identifies pipes it would like to oversize during the plan review process for system capacity or redundancy purposes, this gives them the opportunity and resources to do so. He stated that $100,000 is included in the budget each year for this purpose, to be split between water and sewer.

Mr. Lynn stated that the next steps in the CIP budget process are listed on the last slide, and he would now answer any further questions from the Board.

Ms. Palmer stated that she had a comment on an item before the CIP presentation. She stated that when the ACSA makes the comparison between its water prices and other localities, she would suggest that Greene County be included going forward. She stated that it is a small community but it is growing very fast, and they are talking about a water supply plan.

Mr. Armstrong opened the floor for the public hearing on the CIP presentation. There were no comments from the public and thus, the public hearing was closed.

10. Sediment in the Drinking Water – Power Point Presentation

Mr. O'Connell stated that there has been a shift with the sediment issue since the last time they discussed this with the Board, so he felt it was important to share an update as well as some history on the issue.

Mr. Lynn stated that before he begins his presentation (Attached as Pages_____) he wanted to personally thank Tim Brown. He stated that Mr. Brown has spoken to nearly every one of the impacted customers and has been dedicated to this issue for the last couple of years, and we all owe him a debt of gratitude. He noted that the agenda for his presentation included the initial response, sediment identification, followed by ACSA's action steps and the current study.

Mr. Lynn stated that in October 2021, the ACSA received its first documented call in Glenmore. He stated the initial response was to flush the

lines, the hydrant near the house, and the blow-off at the end of the street but they were not seeing anything. He stated that a year later in October 2022-February 2023 is when the ACSA began receiving a large number of calls in Glenmore, but they still do not see any visible sediment when flushing. He mentioned that at this point, the ACSA embarked on a unidirectional flushing (UDF) program in Glenmore.

Mr. Lynn stated that the next slide showed a couple of photos of the flushing. He noted that the flushing took place between December 2022-January 2023, which is not the best time to flush. He mentioned that all of the flushing was done by in-house maintenance crews and they did a great job. He stated that freezing temperatures can be a problem when putting that much water on the roadway. He noted that the middle photo shows some of what they were seeing during the bag tests. He stated that UDF is considered a best practice for utilities, as it forces high velocity water to scour the pipe to get rid of any debris or build-up. He stated that it was a worthwhile effort, but it did not solve the issue.

Mr. Lynn stated that the next slide shows a map of the Glenmore sediment locations. He stated that the red dots are confirmed sediment issues through house visits and photographs. He stated that the orange dots represent the unconfirmed cases, mostly through data obtained from survey results. He mentioned that in total, there are 41 confirmed cases and 7 unconfirmed. Mr. Parcells asked if they should use green on the map to represent the homes that have not had any issues. Mr. Lynn stated that there are 900 homes in Glenmore and only 4-5% of the homes have experienced the sediment, so the map would be covered in green if they marked the homes that have not had an issue.

Ms. Palmer asked if the homes that have not had an issue reported as much, or if it was a case of the ACSA has not heard from them. Mr. Lynn replied that they have not heard from them. He stated that the ACSA has had extensive communication with the Glenmore HOA, and they feel like

they have heard from a majority of customers that have experienced this sediment issue.

Mr. Lynn stated that in January 2023, the ACSA was still getting complaints from customers after the unidirectional flushing efforts. He stated that RWSA recommended Cornwell Engineering Group. He mentioned that Cornwell has worked extensively with RWSA and performed their corrosion control treatment study a number of years ago. He stated that Cornwell also knows the ACSA's distribution system and has been involved in a lot of the sampling programs. He noted that they have the ability to test the samples as well. He then asked Mr. Brown to show the Board a sample of the sediment.

Mr. Tolbert asked if a customer actually saved that sample from their faucet. Mr. Lynn replied yes. Ms. Palmer asked if the quantity that comes out of the faucet is the same as the sample. Mr. Brown stated that it varies. He stated that the consistency can be like wheatgerm or fish food, or it can be finer grained like sand. He mentioned that they have learned through their work with Cornwell, that it is a mineral sediment that is not coming into the homes from ACSA lines in the road. He noted that it is an internal issue that Mr. Lynn will touch on.

Mr. Lynn stated that the sample was tested through x-ray diffraction and the result showed calcium phosphate, also known as "apatite." He mentioned that most of what customers were seeing was fluorapatite, which is comprised of fluoride, calcium, and phosphate. He noted that fluoride is added to the drinking water, calcium is picked up from cement-lined pipe as the water travels from the treatment plant to the homes, and phosphate is part of the corrosion control treatment process. He mentioned that there are no concerns about consuming the water and it is safe to drink, but it is a pain in the neck for ACSA customers.

Mr. Lynn stated that, as mentioned before, the sediment was not being seen at the street. He stated that several customers installed whole house filters on the cold-water line coming into the house, so every bit of

water that came into the home was passing through a whole house filter and the filter was not picking up anything. He noted that the customers were still getting the sediment, and that is when they discovered that most, if not all, of the sediment was forming in the hot water systems.

Mr. Lynn stated that Cornwell posed several observations in April 2023, the first of which was the Glenmore Tank constructed in 2019. He stated that this issue did not happen until after the tank was built. He stated that Cornwell also looked at the corrosion control treatment process, which just changed in 2021 for the Urban system. He noted that, again, none of these issues happened before that change. He stated that they also looked at whether the pH and age of the water could be reduced, and asked RWSA to perform sampling at various points along the way from South Rivanna to Rio Road, on to Pantops and to the back of Glenmore. He added that Cornwell also asked the ACSA maintenance crews to conduct some pipe sampling for testing.

Mr. Lynn stated that, at this point, everyone pointed to the Glenmore Tank as the source of the issue. He stated that the tank was built for redundancy purposes. He stated that Glenmore sits at the end of a 4.5-mile pipeline so if there are any issues on that pipeline, there would be an entire community without water. He mentioned that the tank can provide service long enough to make any necessary repairs. He noted that the tank was built with a concrete slab and there was no coating on it, which is typical for a lot of ACSA's glass-lined tanks. The thought was that perhaps the water was picking up the calcium from the concrete floor as it was sitting in the tank. He stated that Cornwell recommended that the ACSA coat the floor of the tank. He stated that in October 2023, the ACSA had a contractor put an epoxy coating on the floor of the tank. He noted that it is a 600,000-gallon tank, so it was not cheap. He stated, however, that they continued to have the sediment issue even after the tank floor was coated.

Mr. Lynn stated that in terms of corrosion control treatment, RWSA puts a corrosion inhibitor chemical into the system to coat the pipes and

plumbing fixtures. He stated that it is very effective at reducing lead and other metals in the drinking water. He stated that RWSA previously used a product called zinc polyphosphate, but the EPA no longer accepts polyphosphate as a best practice for corrosion control. He mentioned that after extensive testing with Cornwell, RWSA decided to switch to monosodium orthophosphate. He stated that RWSA started out with a blend of the two products, and used a step approach until they reached an orthophosphate only treatment process for the entire system.

Mr. Lynn stated that with pH and water age, a lower water age equals a lower pH level. He stated that this is because as water sits in contact with the cement coating of the ductile iron pipe, the calcium transfers that leads to increased pH levels. He noted that Glenmore is at the far end of the system, and probably has the oldest water age in the Urban system. The thought was that perhaps by reducing the water age, it would reduce the likelihood that the sediment will form in the hot water system. He stated that between May and October of 2023, the ACSA flushed 30,000 gpd at the Glenmore sewer plant. He noted that this, combined with the irrigation usage in Glenmore, seemed to have a very positive impact. He stated, however, between October and December 2023, the irrigation demand stopped and the domestic use went down as well, which is generally the case. He stated that in order to mimic the summer demand during the winter, the ACSA increased the flushing and is currently flushing upwards of 90,000 gpd at the sewer plant.

Mr. Parcells asked how many days out of the period is the ACSA flushing 90,000 gallons. Mr. Lynn replied every day. Mr. Parcells asked how that water is being paid for. Mr. Lynn stated that is part of what the ACSA pays RWSA monthly. Mr. Brown stated that the ACSA knows this is not the sustainability image that it wants to project to its customers. He stated that it has bought the ACSA some time to do some more work with Cornwell.

Ms. Palmer asked how we can be sure this issue stems from the ACSA, given how separate it is. She stated that it could be something

specific in the plumbing of these houses. Mr. Lynn stated that he would speak to that in just a moment, and hopefully answer Ms. Palmer's question.

Mr. Lynn stated that one of Cornwell's recommendations was to extract a couple of sections of ductile iron pipe, to see if the pipe was losing its cementitious coating. He stated that they took a section from the front of the neighborhood and one from the back, and both were found to be in great shape. Mr. Parcells asked what material the cementitious coating is made of. Mr. Brown stated that it is cement and inside of that is a final epoxy or other material. Mr. Parcells asked if this is a standard coating for all ductile iron pipe throughout the system. Mr. Lynn replied yes, this is a standard coating in all recent ductile iron pipe. He mentioned that there are some unlined cast iron pipes in the system.

Mr. Lynn stated that the issue started to flare up again around December 2023. Mr. O'Connell stated that he wanted to provide some context to that. He stated that the ACSA was receiving phone calls from customers that were extremely upset. He mentioned that washing machines and hot water heaters were getting jammed up, and people were having to file insurance claims. Mr. Lynn stated that he wanted to credit Emily Roach, as she has worked with the ACSA's insurance company on a lot of the claims and guided customers through that process.

Mr. Lynn stated that leading up to the public meeting with Glenmore and other community partners, the VDH reached out to some resources they have to try and help with the issue. He stated that they contacted an EPA research engineer that has experience with corrosion control, and he very quickly honed in on the fact that the zinc had been removed from the corrosion control chemical. He stated that this particular engineer's opinion was that removing the zinc was the issue. He stated that this led RWSA to reengage Cornwell before making a corrosion control treatment change that would impact the entire system.

Mr. Lynn stated that the entire Glenmore community was surveyed, with about a 30% participation rate. He noted that a lot of people that were

not experiencing the sediment did say they were not having an issue. He stated that Cornwell suggested that the ACSA perform in-home testing on both the cold and hot water, in a group of homes. He mentioned that Mr. Brown worked his magic, and the ACSA miraculously developed a testing schedule of Tuesdays and Thursdays. He stated that ACSA and RWSA staff are currently sampling eight homes every week, for four weeks. He noted that the eight homes are split into different categories of seeing the sediment with recirculation systems, not seeing the sediment with recirculation systems, etc. He mentioned that recirculation pumps on hot water systems seemed to be a big factor with those customers that are experiencing the issue. He added that they are currently in week two of in-home sampling. He noted that Cornwell is also looking at water age analysis for Glenmore, and RWSA has installed pH probes to continuously monitor the pH on the hot and cold water at the Glenmore sewer plant.

Mr. Parcells asked about filtering the hot water supply. Mr. Brown stated that the only commonality between the hot water heaters in these homes is that they generate heat. He noted that they are all different types and brands. He noted that the pathway to get water upstairs to a master bath in these homes is a long one, thus the recirculation pumps in the homes.

Mr. Lynn stated that Cornwell is conducting bench testing with the monosodium orthophosphate, sealed and unsealed, as well as three unsealed with varying levels of zinc orthophosphate. He stated that they anticipate testing to be completed around June-July, at which time they will have a better idea as to if this is the solution.

Mr. Lynn stated that the week of the Glenmore community meeting in December, the ACSA heard from a customer in Farmington with a similar sediment issue. He stated that since then, they have spoken to four Farmington customers, one Inglecress customer, and one customer in West Leigh. He stated that the samples have been sent off to Cornwell and the EPA for testing, so he cannot say with 100% certainty that it is the apatite

but it appears to be. Ms. Palmer and Mr. Tolbert asked if they have recirculation pumps as well. Mr. Lynn replied that he believes all of them do.

Mr. Lynn stated that if water age and pH are a big factor with the sediment issue, then it is no surprise that it is occurring at the other end of the system. He stated that Glenmore is to the east, and this is the far reach of our system on the western side. Mr. Tolbert asked if Farmington is that far out in the system. Mr. Lynn stated that West Leigh and Owensville Road are further. He noted the teal line on the map which represents RWSA's transmission main and stated that most of the customers are to the south of that, one to the north, and the Owensville Road area to the west.

Mr. Tolbert stated that he wonders if there are similarities between the customers in Glenmore and those in Farmington. Mr. Lynn stated that ACSA staff showed a Farmington customer a picture of the sediment, and they had already seen it because their friend in Glenmore showed it to them.

Mr. Lynn showed a picture of the back of a washing machine that belongs to a Farmington customer. He stated that he thinks this is the worst case of the sediment issue that he has seen thus far. Mr. O'Connell added that the amount of sediment burned up the motor in the machine.

Mr. Lynn stated that in terms of a solution, they still do not have an answer. Mr. Parcells asked if the customers that did not use a recirculation pump, had sediment in their hot water heater filters. Mr. Lynn stated that those customers would be less likely to have sediment than those that have the recirculation, because the water is passing through one time and being used.

Ms. Palmer stated that she is struggling to understand how the ACSA is responsible for the issue. She stated that if these customers have a lifestyle that requires a recirculation pump as opposed to putting a heater under their sink, why is the ACSA responsible for that. Mr. Lynn stated that the ACSA wants to ensure that it is not something we have caused. Ms. Palmer asked if they had not already done that. Mr. Lynn replied that they have not finished the study yet. He noted that it was not happening in 2015

or 2020, so they want to make sure they are not contributing to the issue. Mr. O'Connell noted that these homes have been in the ACSA system for a long time. Mr. Brown added that the recirculation pump is not a new add-on, so the question is what has changed. He stated that he only knows of one home with a confirmed sediment issue that does not use recirculation. He added, however, that there are hundreds of homes in Glenmore that use recirculation but have not had the sediment issue. Ms. Palmer stated that it seems to her that there is something individual about the homes having the issues. Mr. Lynn stated that the in-home sampling will help to figure out what that might be.

11. Items Not on the Agenda

Mr. O'Connell stated that he had two quick items to mention. He stated that the Annual Quality Report went out. He stated that there is a large section about PFAS standards in the report, and there will be a presentation next month about the report. He mentioned that there 400,000 or more tests annually to say we have safe, clean drinking water for ACSA customers.

Mr. O'Connell stated that he also wanted to point out some of the positive comments on X (formerly known as Twitter) about the 60th anniversary rap played earlier in the meeting. He stated that the song will be promoted a variety of ways, including social media. Ms. Palmer asked to be notified when it is posted because she would like to share it as well.

Mr. Armstrong stated that he wanted to announce that the ACSA Board is holding a closed meeting solely for the purpose of interviewing candidates for the position of Chief Executive Officer, i.e., Executive Director, which will be held at the ACSA's offices within 15 days from today.

12. Executive Session – Personnel Matter

Ms. Trent read a Resolution to enter Executive Session pursuant to Virginia Code §2.2-3711 A (1) to discuss a personnel matter (Attached as Page_____).

Mr. Parcells moved to approve the Resolution as presented to the Board; seconded by Ms. Palmer. The Chair asked for a roll-call vote: Mr. Parcells, aye; Ms. Palmer, aye; Mr. Tolbert, aye; Mr. Armstrong, aye; Mr. Roberts, aye; Ms. Swanson, aye.

The Board of Directors came back into regular session. Ms. Trent read into record a Resolution stating that only matters so previously stated and exempted from open discussion in regular session were discussed in Executive Session (Attached as Page _____).

Ms. Palmer moved to approve the Resolution as presented to the Board, seconded by Mr. Parcells. The Chair asked for a roll-call vote: Mr. Parcells, aye; Ms. Palmer, aye; Mr. Tolbert, aye; Mr. Roberts, aye; Mr. Armstrong, aye; Ms. Swanson, aye.

13. Adjourn

There being no further business, Mr. Armstrong moved that the meeting be adjourned. All members voted aye.

_____

Gary B. O'Connell, Secretary-Treasurer

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Monthly Financial Reports **STAFF CONTACT/PREPARER:** Quin Lunsford, Director of Finance	**AGENDA DATE:** May 16, 2024 **ACTION:** Informational **ATTACHMENTS:** Yes

BACKGROUND: Water and sewer financial reports and check registers for the month of April are attached for your review.

DISCUSSION:

- Water consumption for the month of March increased 1.7% compared to February. Water consumption for the month of March 2024 compared to March 2024 increased 2.6%.
- RWSA's invoice of $2,342,273 for the month of March was paid on April 8, 2024.
- Unearned water and sewer connection charges totaled $3,388,607 at month end.
- System connection charges are slightly ahead of budgeted expectations with $482,515 recognized in April.
- Water and Wastewater revenues for FY 2024 are above budgeted expectations by 3.1%. Please see the water/wastewater trend analysis included illustrating that when adjustment for expected variations in seasonal consumption are considered, revenues are 3.7% higher than budgeted expectations.

BUDGET IMPACT: Informational only.

RECOMMENDATIONS: None

BOARD ACTION REQUESTED: None; informational item only.

ATTACHMENTS:

1. Statement of Net Position
2. Year-to-Date Budget to Actual Comparison/Commentary
3. Investment Summary
4. Capacity/System Development Reserves
5. Connection Charges/ERC Analysis
6. Monthly Water and Sewer Charges from the RWSA
7. Monthly Water Consumption
8. Water and Sewer Report; Customer Class Report
9. Major Customer Analysis
10. Water/Wastewater Revenue Trend Analysis
11. Aged Receivables Analysis
12. Check Register

ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF NET POSITION
April 30, 2024

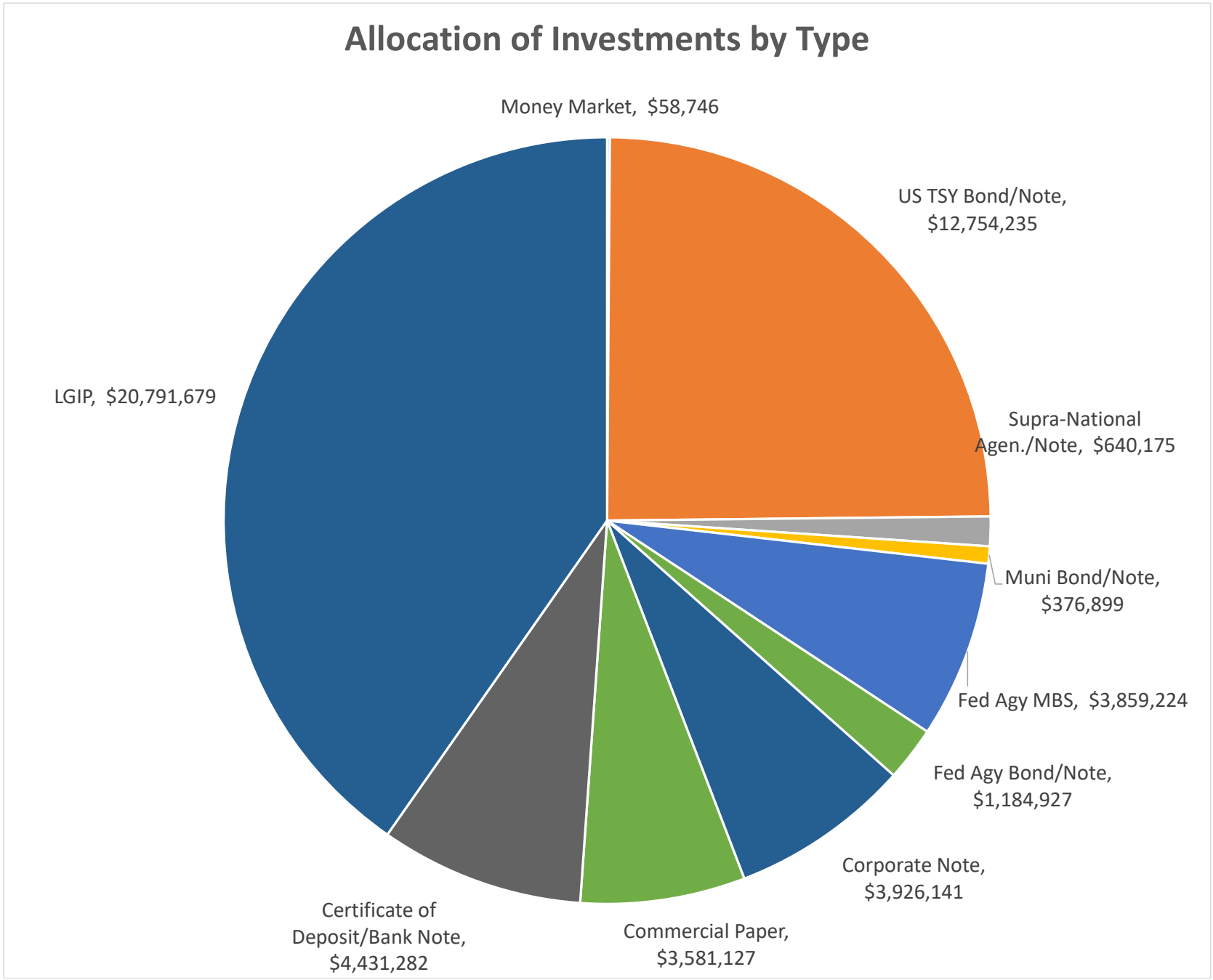
ASSETS		
Cash and cash equivalents	$	10,843,388
Accounts receivable		4,854,722
Investments		51,604,435
Capital assets: (net of accumulated depreciation)		181,981,212
Inventory		841,527
Prepaids		261,472
Cash and cash equivalents, restricted		646,749
Total assets		251,033,505
DEFERRED OUTFLOWS OF RESOURCES		
Combined deferred outflows of resources		1,175,852
LIABILITIES		
Accounts payable		3,235,334
Accrued liabilities		553,776
Compensated absences		746,495
Net pension liability		2,454,029
Other post-employment benefits		1,244,519
Unearned connection fees		3,388,607
Long-term debt		4,175,883
Total liabilities		15,798,643
DEFERRED INFLOWS OF RESOURCES		
Combined deferred inflows of resources		1,104,953
NET POSITION		235,305,761

ALBEMARLE COUNTY SERVICE AUTHORITY
For the One Month Ending April 30, 2024

	Budget FY 2024	Budget Year-to-Date 2024	April Actual Year-to-Date	Actual vs. Budget	Variance Percentage	
Revenues						
Water Sales	20,580,000.	17,150,000.	17,729,864.	579,864.	3.38%	
Sewer Service	16,679,000.	13,899,167.	14,291,733.	392,566.	2.82%	
Total operating revenues	**37,259,000.**	**31,049,167.**	**32,021,597.**	**972,430.**	**3.13%**	**A**
Operating Expenses						
Purchase of bulk water	(16,256,000.)	(13,546,667.)	(13,491,200.)	55,467.	(0.41%)	**B**
Purchase of sewer treatment	(11,689,000.)	(9,740,833.)	(9,477,302.)	263,531.	(2.71%)	**B**
Administration	(1,475,500.)	(1,229,583.)	(1,052,469.)	177,114.	(14.40%)	**C**
Finance	(2,890,000.)	(2,408,333.)	(2,154,947.)	253,386.	(10.52%)	**C**
Information Technology	(1,787,600.)	(1,489,667.)	(1,356,484.)	133,183.	(8.94%)	**C**
Engineering	(2,400,300.)	(2,000,250.)	(1,735,398.)	264,852.	(13.24%)	**C**
Maintenance	(4,749,900.)	(3,958,250.)	(3,382,034.)	576,216.	(14.56%)	**C**
Total operating expenses	**(41,248,300.)**	**(34,373,583.)**	**(32,649,834.)**	**1,723,749.**	**(5.01%)**	
Operating gain(loss)	**(3,989,300.)**	**(3,324,417.)**	**(628,237.)**	**2,696,180.**	**(81.10%)**	
Nonoperating Revenues						
System connection charges	8,000,000.	6,666,667.	7,056,310.	389,643.	5.84%	**D**
Investment/Interest Income	600,000.	500,000.	2,227,355.	1,727,355.	345.47%	**E**
Rental income	16,000.	13,333.	15,987.	2,654.	19.90%	
Miscellaneous revenues	761,000.	634,167.	463,013.	(171,154.)	(26.99%)	**F**
Total nonoperating revenues (expenses)	**9,377,000.**	**7,814,167.**	**9,762,665.**	**1,948,498.**	**24.94%**	
Nonoperating Expenses						
Miscellaneous expenses	(327,300.)	(272,750.)	(630,685.)	(357,935.)	131.23%	**G**
Bond interest charges	(183,859.)	(153,216.)	(96,991.)	56,225.	(36.70%)	**H**
Depreciation	0.	0.	(3,565,559.)	(3,565,559.)	0.00%	**I**
Total nonoperating revenues (expenses)	**(511,159.)**	**(425,966.)**	**(4,293,235.)**	**(3,867,269.)**	**907.88%**	
Capital contributions	**0.**	**0.**	**942,898.**	**942,898.**	**0.00%**	
Change in Net Position	**4,876,541.**	**4,063,784.**	**5,784,091.**	**1,720,307.**	**42.33%**	

Albemarle County Service Authority
Actual-to-Budget Year to Date Commentary

- **A.** Water and sewer revenues were more than budgeted amounts by 3.1%. Consumption through April (gallons) appears reasonable considering the ACSA's normal seasonal consumption pattern. Further information related to seasonal revenue expectations can be found later in the Board packet.
- **B.** Expenses related to purchases of bulk water and sewer treatment from the RWSA are less than budgeted amounts by 1.4%. Monthly billings prepared by the RWSA allocate total water/wastewater flows to the ACSA/City based on the consumption of each for the quarter immediately preceding.
- **C.** Departmental operating budgets through the current month remain below budgeted expectations for the fiscal year. Departmental expenses will continue to be monitored throughout the fiscal year and are expected to align with the budget.
- **D.** System connection charges are higher than the budgeted amount. Connection charges are often difficult to project and can fluctuate from year to year. These charges are dependent upon new customers connecting to the system.
- **E.** Investment income, which includes both interest income and adjustments to fair market value are recorded in these accounts. Investment earnings are ahead of budgeted expectations through the current month.
- **F.** Miscellaneous revenues consist of multiple lines and include inspection fees, plan review, reconnections/initial bill fees, invoiced water usage, and gains associated with sales of capital assets retired from service.
- **G.** The budgeted amount includes expected outlays for capital equipment and losses on disposal of capital assets. Equipment is capitalized when placed in service.
- **H.** Bond interest charges are recorded as incurred.
- **I.** Depreciation is not a budgeted line-item accounting for the variance. Depreciation expense is considered during the annual budgeting process as this expense is utilized to calculate the required contribution to the 3r reserve.


Allocation of Investments by Type
Money Market, $58,746
US TSY Bond/Note, $12,754,235
Supra-National Agen./Note, $640,175
Muni Bond/Note, $376,899
Fed Agy MBS, $3,859,224
Fed Agy Bond/Note, $1,184,927
Corporate Note, $3,926,141
Commercial Paper, $3,581,127
Certificate of Deposit/Bank Note, $4,431,282
LGIP, $20,791,679

pfm asset management

Portfolio Summary and Statistics

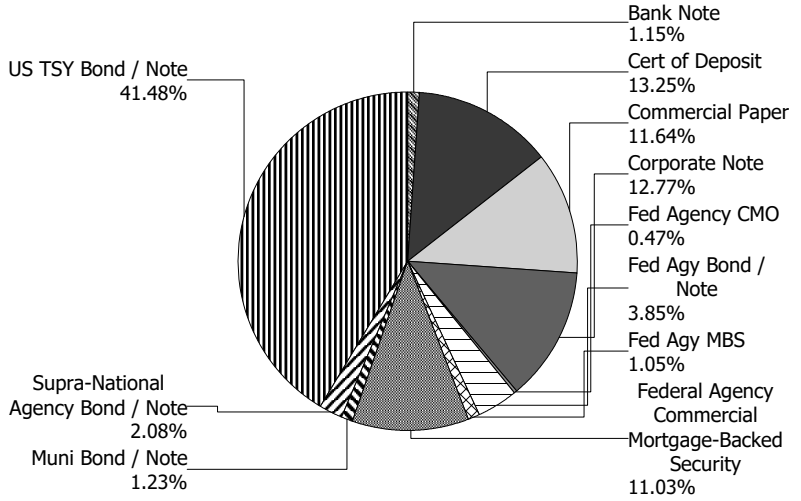
For the Month Ending **April 30, 2024**

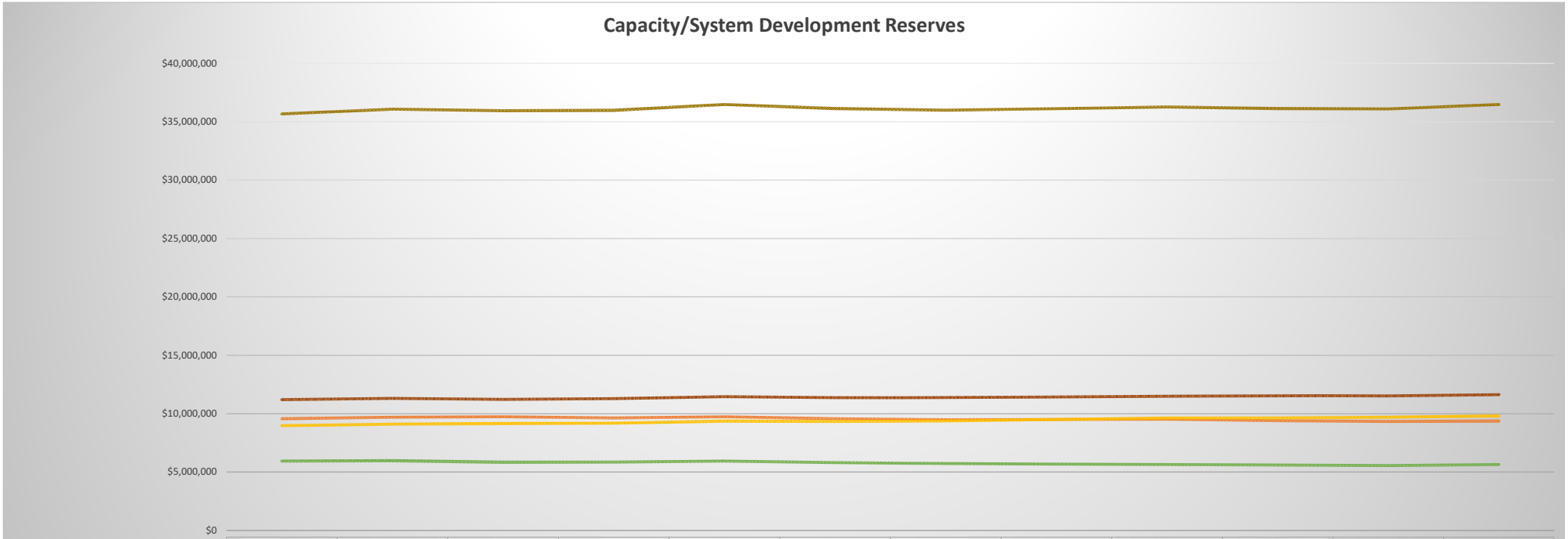
ACSA OPERATING FUNDS - 03100100

Account Summary

Description	Par Value	Market Value	Percent
U.S. Treasury Bond / Note	12,985,000.00	12,754,235.40	41.48
Supra-National Agency Bond / Note	650,000.00	640,175.44	2.08
Municipal Bond / Note	380,000.00	376,899.00	1.23
Federal Agency Mortgage-Backed Security	347,511.84	323,522.30	1.05
Federal Agency Commercial Mortgage-Backed Security	3,523,936.53	3,392,149.51	11.03
Federal Agency Collateralized Mortgage Obligation	144,824.23	143,552.19	0.47
Federal Agency Bond / Note	1,200,000.00	1,184,926.80	3.85
Corporate Note	4,015,000.00	3,926,141.45	12.77
Commercial Paper	3,675,000.00	3,581,127.45	11.64
Certificate of Deposit	4,075,000.00	4,076,102.20	13.25
Bank Note	355,000.00	355,179.63	1.15
Managed Account Sub-Total	**31,351,272.60**	**30,754,011.37**	**100.00%**
Accrued Interest		308,454.21	
Total Portfolio	**31,351,272.60**	**31,062,465.58**	
Unsettled Trades	**0.00**	**0.00**	

Sector Allocation





	5/1/2023	6/1/2023	7/1/2023	8/1/2023	9/1/2023	10/1/2023	11/1/2023	12/1/2023	1/1/2024	2/1/2024	3/1/2024	4/1/2024
RWSA Cap. Chg. Water	9,570,866	9,691,093	9,731,514	9,641,971	9,734,013	9,582,110	9,492,484	9,502,177	9,520,716	9,387,012	9,335,557	9,371,369
RWSA Cap. Chg. WW	8,967,246	9,098,201	9,151,718	9,180,383	9,359,821	9,339,437	9,372,446	9,496,123	9,624,292	9,627,839	9,681,934	9,812,569
ACSA Dev Chg. Water	5,938,744	5,972,725	5,840,739	5,858,100	5,931,316	5,815,954	5,738,906	5,684,584	5,632,511	5,600,173	5,557,878	5,651,315
ACSA Dev Chg. WW	11,198,040	11,302,879	11,222,262	11,294,959	11,460,513	11,385,424	11,384,984	11,428,476	11,485,278	11,510,685	11,513,974	11,635,751
Total	35,674,897	36,064,899	35,946,233	35,975,413	36,485,663	36,122,925	35,988,820	36,111,360	36,262,797	36,125,710	36,089,343	36,471,004

Note: Additions to Capacity/System Development Reserves are from monthly connection charges, reductions to the reserves are from monthly growth related expenses/capital costs.

Albemarle County Service Authority
Connection Fee Analysis
March 2024

Area	March 2024 Monthly Connection Fees	March 2023 Monthly Connection Fees	$ Change	% Change
Crozet	$ 101,010	$ 80,820	$ 20,190	25%
Urban	831,365	332,585	498,780	150%
Scottsville	-	-	-	
Total Connection fees	$ 932,375	$ 413,405	$ 518,970	126%

Through March

Area	YTD FY 2024 Connection Fees	YTD FY 2023 Connection Fees	$ Change	% Change
Crozet	$ 2,197,555	$ 1,097,805	$ 1,099,750	100%
Urban	4,375,940	5,849,656	(1,473,716)	-25%
Scottsville	300	-	300	-
Total Connection fees	$ 6,573,795	$ 6,947,461	$ (373,666)	-5%

Area	March 2024 ERC's	March 2023 ERC's	Change	% Change
Crozet	7	6	1	17%
Urban	58	25	33	132%
Scottsville	-	-	-	-
Total ERC's	65	31	34	110%

Through March

Area	YTD FY 2024 ERC's	YTD FY 2023 ERC's	Change	% Change
Crozet	152	82	70	85%
Urban	302	434	(132)	-30%
Scottsville	-	-	-	-
Total ERC's - YTD	454	516	(62)	-12%

Note: This analysis shows, both in dollars and ERC's, connections by month and YTD for the period under review. As noted above, connection fees are comparable to the prior year. See the "Three Year Connection Fee Comparison" for further discussion related to this change.

Albemarle County Service Authority
Three Year Connection Fee Comparison
March 2024

Area	March 2024 ERC's	March 2023 ERC's	March 2022 ERC's
Crozet	7	6	21
Urban	58	25	47
Scottsville	-	-	-
Total ERC's	65	31	68

Through March

Area	YTD 2024 ERC's	YTD 2023 ERC's	YTD 2022 ERC's
Crozet	152	82	94
Urban	302	434	367
Scottsville	-	-	-
Total ERC's - YTD	454	516	461

Note: The information above present ERCs by month and YTD for the current and past two fiscal years. As noted in the YTD portion of the analysis, current YTD ERCs appear reasonable considering continued development within the ACSA's service area.

Albemarle County Service Authority
Water and Sewer Charges from the RWSA
Fiscal Year 2024

	FY 2024 RWSA Charges	FY 2023 RWSA Charges	Increase (Decrease)	
July	$ 2,352,971	$ 2,041,957	$ 311,014	15.23%
August	2,352,440	2,042,399	310,041	15.18%
September	2,286,484	2,083,284	203,200	9.75%
October	2,277,041	2,021,265	255,776	12.65%
November	2,204,989	1,987,793	217,196	10.93%
December	2,249,566	2,025,214	224,352	11.08%
January	2,356,246	1,990,411	365,835	18.38%
February	2,269,378	1,956,978	312,400	15.96%
March	2,342,273	2,006,071	336,202	16.76%
April	2,265,591	2,013,296	252,295	12.53%
May		2,021,900		
June		1,979,565		
	$ 22,956,978	$ 24,170,133		
YTD	$ 22,956,978	$ 20,168,669	$ 2,788,310	13.82%

Note: The charges noted above from the RWSA include operating and debt service charges.

Albemarle County Service Authority
Consumption Analysis
Fiscal Year 2024

				Monthly Precipitation (In.)	
	FY 2024 Consumption	**FY 2023 Consumption**		**FY 2024**	**FY 2023**
July	154,300,020	155,932,214	-1.05%	5.44	6.42
August	170,746,002	159,969,362	6.74%	2.51	4.10
September	176,070,325	155,676,979	13.10%	2.98	2.79
October	165,947,566	152,513,014	8.81%	0.59	2.24
November	154,337,781	148,761,821	3.75%	3.67	4.52
December	145,323,150	134,997,083	7.65%	4.80	4.60
January	137,727,440	138,803,649	-0.78%	6.58	2.32
February	135,574,438	126,909,570	6.83%	2.31	2.87
March	137,885,342	134,395,216	2.60%	3.70	1.36
April		140,263,055	-100.00%		4.67
May		140,578,641	-100.00%		2.31
June		163,336,945	-100.00%		4.81
	1,377,912,064	1,752,137,549		32.58	43.01
YTD	1,377,912,064	1,307,958,908	5.35%	32.58	31.22

Note: Consumption through March 2024 is 5.35% more than the same period in fiscal year 2023. Monthly precipitation figures have been included for comparison purposes. Trends in rainfall can sometimes correlate with trends in consumption however, depending on the intensity, days between rain events, or other factors, this may not always be the case.

Note: Precipitation data obtained from National Oceanic and Atmospheric Administration (NOAA): https://www.ncdc.noaa.gov/cdo-web/search.

Albemarle County Service Authority

Serving Conserving

Water and Sewer Report
(Volumes in Gallons)

March 2024

Billed by Area:	***Water***	***Sewer***
Crozet	15,090,601	14,370,878
Scottsville	812,582	697,995
Urban	121,939,590	108,728,930
Red Hill	42,569	0
Total	***137,885,342***	***123,797,803***

Billing by Sewer Plant:	
Total Urban and Crozet	123,099,808
less Glenmore WRRF	(3,198,335)
Moores Creek AWRRF	119,901,473
Scottsville WRRF	697,995
Total	***120,599,468***

Number of Installed Meters:	
Urban	36
Crozet	7
Scottsville	0
Total	***43***

Hydrant Meter Consumption (billed by invoice):	
Urban	240,400
Crozet	0
Scottsville	0
Total	***240,400***

Estimated Water Loss:		
Firethorn Lane	Crozet	100
1623 Gatewick Place	Urban	100
121 Oak Forest Circle	Urban	10
353 Squirrel Path	Urban	5,000
	Total	***5,210***

Billed Consumption for Selected Customers

	Water	Sewer		Water	Sewer
Virginia Land Holding	290,104	290,104	Boar's Head Inn	371,679	298,248
Southwood Mobile Homes	1,539,500	1,920,000	Farmington Inc.	827,772	314,056
Turtle Creek Apts.	1,767,094	1,759,847	Westgate Apts.	1,234,033	1,233,633
Barracks West Apartments	1,709,084	1,709,084	PR Charger C'ville Holdings	1,760,432	1,760,432
Monroe Health & Rehab.	689,291	689,291	Four Seasons Apts	1,525,751	1,525,751
Sunrise Senior "Colonnades"	775,724	635,124	Ch'ville/Alb Airport	110,231	110,282
ACRJ	896,860	883,860	State Farm Ins	1,655,510	1,655,510
Westminster Canterbury	1,291,420	1,291,420	Hyatt @ Stonefield	398,690	398,690
SEMF Charleston	1,417,163	1,417,163	Doubletree	834,353	834,353
Martha Jefferson Hospital	1,642,705	1,307,398	Arden Place Apts	499,413	499,413
Crozet Mobile Home Village	248,414	248,414	Hilton Garden Inn	201,967	201,967
The Home Depot	120,576	120,576	The Blake & Charlottesville	247,836	247,836
County of Albemarle	1,315,752	1,213,353	The Lodge @ Old Trail	245,708	245,708
University of Virginia	1,564,183	1,559,974	Gov't-Defense Complex	748,749	748,748
Wegmans	344,291	344,291	Harris Teeter Stores	131,424	131,424

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Albemarle County Service Authority

Serving Conserving

Customer Class Report

March 2024

WATER

Class Type	Number of Connections by Area			
	Urban	Crozet	Scottsville	Total
Single-Family Residential	16,190	3,961	195	20,346
Multi-Family Residential	575	45	3	623
Commercial (Offices)	201	12	5	218
Commercial (Other)	934	76	53	1,063
Industrial	36	11	4	51
Institutional	171	32	12	215
Total Water Connections	**18,107**	**4,137**	**272**	**22,516**
Plus Multiple Units	13,432	781	89	14,302
Total Water Units	**31,539**	**4,918**	**361**	**36,818**

SEWER

Class Type	Number of Connections by Area			
	Urban	Crozet	Scottsville	Total
Single-Family Residential	13,877	3,686	157	17,720
Multi-Family Residential	544	43	4	591
Commercial (Offices)	186	12	5	203
Commercial (Other)	726	52	45	823
Industrial	15	5	1	21
Institutional	133	25	10	168
Total Sewer Connections	**15,481**	**3,823**	**222**	**19,526**
Plus Multiple Units	13,016	778	56	13,850
Total Sewer Units	**28,497**	**4,601**	**278**	**33,376**

POPULATION SERVED

Population served is the total Single-Family and Multi-Family units using an occupancy of 2.5 residents per unit:

	Urban	Crozet	Scottsville	Total
Total Water Customers	74,055	11,855	710	86,620
Total Sewer Customers	67,233	11,160	533	78,925

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Albemarle County Service Authority
Major Customer Analysis
March 2024 and February 2024

	March 2024		February 2024		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
State Farm	1,655,510	1,655,510	1,129,220	1,128,194	46.61%	46.74%
Turtle Creek Apts.	1,767,094	1,759,847	1,452,281	1,445,381	21.68%	21.76%
ACRJ	896,860	883,860	765,260	743,260	17.20%	18.92%
Westmisnster Canterbury	1,291,420	1,291,420	1,129,250	1,129,250	14.36%	14.36%
County of Albemarle	1,315,752	1,213,353	1,179,223	1,097,035	11.58%	10.60%
University of Virginia	1,564,183	1,559,974	1,414,959	1,412,001	10.55%	10.48%
Westgate Apts.	1,234,033	1,233,633	1,193,964	1,193,964	3.36%	3.32%
Martha Jefferson Hospital	1,642,705	1,307,398	1,619,761	1,531,761	1.42%	-14.65%
Four Seasons Apts.	1,525,751	1,525,751	1,530,343	1,530,343	-0.30%	-0.30%
Barracks West Apartments	1,709,084	1,709,084	1,761,148	1,761,148	-2.96%	-2.96%
Southwood Mobile Homes	1,539,500	1,920,000	1,654,520	2,110,000	-6.95%	-9.00%
PR Charger C'ville Holdings	1,760,432	1,760,432	1,999,294	1,999,294	-11.95%	-11.95%
SEMF Charleston	1,417,163	1,417,163	1,654,960	1,654,960	-14.37%	-14.37%

Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion, weather, vacancies, etc.

*** -- Consumption/usage in gallons.**

Albemarle County Service Authority
Major Customer Analysis
March 2024 and March 2023

	March 2024		March 2023		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
State Farm	1,655,510	1,655,510	1,199,650	1,196,650	38.00%	38.35%
Turtle Creek Apts.	1,767,094	1,759,847	1,367,181	1,366,781	29.25%	28.76%
Barracks West Apartments	1,709,084	1,709,084	1,353,800	1,353,800	26.24%	26.24%
Westmisnster Canterbury	1,291,420	1,291,420	1,129,360	1,129,360	14.35%	14.35%
Westgate Apts.	1,234,033	1,233,633	1,121,363	1,121,363	10.05%	10.01%
ACRJ	896,860	883,860	894,570	860,570	0.26%	2.71%
PR Charger C'ville Holdings	1,760,432	1,760,432	1,760,103	1,760,103	0.02%	0.02%
Martha Jefferson Hospital	1,642,705	1,307,398	1,685,692	1,357,516	-2.55%	-3.69%
Southwood Mobile Homes	1,539,500	1,920,000	1,693,890	2,030,000	-9.11%	-5.42%
Four Seasons Apts.	1,525,751	1,525,751	1,741,411	1,741,411	-12.38%	-12.38%
County of Albemarle	1,315,752	1,213,353	1,508,064	1,280,932	-12.75%	-5.28%
SEMF Charleston	1,417,163	1,417,163	1,649,276	1,649,276	-14.07%	-14.07%
University of Virginia	1,564,183	1,559,974	2,126,689	2,124,019	-26.45%	-26.56%

Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion, weather, vacancies, etc.

*** -- Consumption/usage in gallons.**

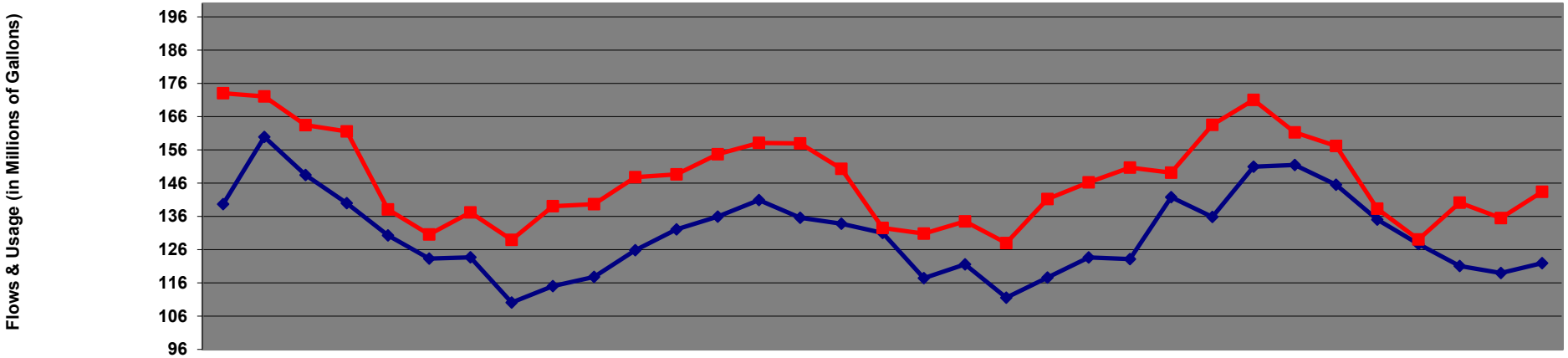
Albemarle County Service Authority
Major Customer Analysis
Year-to-date Comparison: Current Year/Prior Year -- March

	YTD FY 2024		YTD FY 2023		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
State Farm	15,863,230	15,141,122	4,548,800	4,034,800	248.73%	275.26%
Barracks West Apartments	15,824,355	15,824,355	13,158,300	13,158,300	20.26%	20.26%
County of Albemarle	14,553,159	10,037,960	12,254,033	10,167,270	18.76%	-1.27%
Turtle Creek Apts.	12,876,422	12,829,549	11,450,918	11,423,018	12.45%	12.31%
Westmisnster Canterbury	13,531,360	12,952,360	12,378,110	11,794,110	9.32%	9.82%
PR Charger C'ville Holdings	18,309,793	18,309,793	16,750,094	16,750,094	9.31%	9.31%
University of Virginia	17,279,928	17,246,328	16,030,470	15,994,346	7.79%	7.83%
Martha Jefferson Hospital	18,690,909	11,894,157	17,593,574	10,613,594	6.24%	12.07%
SEMF Charleston	14,094,450	14,094,450	13,345,001	13,345,001	5.62%	5.62%
Southwood Mobile Homes	15,707,310	18,990,000	15,670,745	19,260,000	0.23%	-1.40%
Westgate Apts.	10,748,603	10,741,903	11,105,385	11,099,085	-3.21%	-3.22%
ACRJ	8,761,000	7,810,000	9,434,270	8,363,270	-7.14%	-6.62%
Four Seasons Apts.	14,037,326	14,037,326	15,244,880	15,244,880	-7.92%	-7.92%

Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion, weather, vacancies, etc.

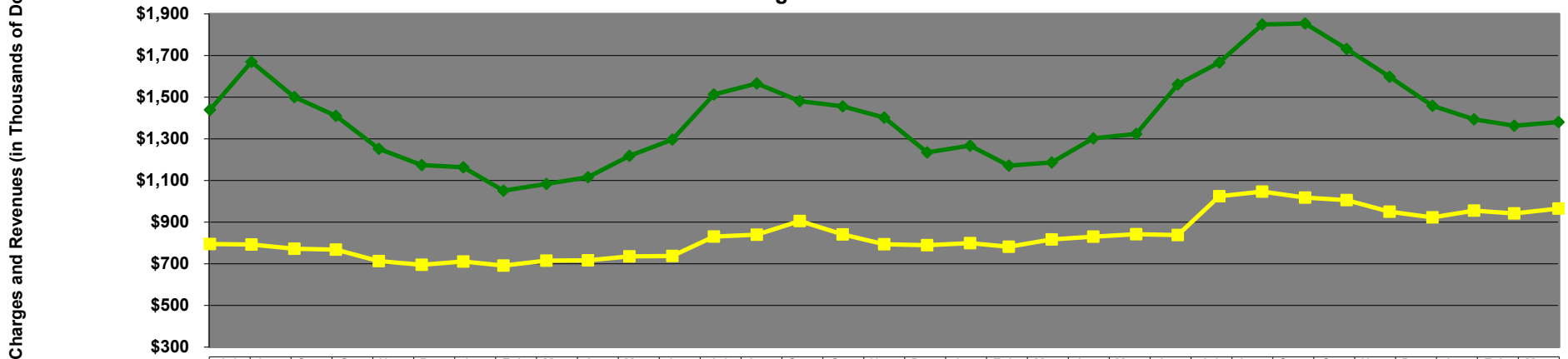
*** -- Consumption/usage in gallons.**

FY 2022, 2023, and 2024 Urban Water Comparison
RWSA Flows & ACSA Customer Usage



	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Usage	140	160	148	140	130	123	124	110	115	118	126	132	136	141	136	134	131	117	122	112	118	124	123	142	136	151	151	146	135	128	121	119	122
RWSA Flows	173	172	163	162	138	131	137	129	139	140	148	149	155	158	158	150	133	131	134	128	141	146	151	149	164	171	161	157	138	129	140	135	143
Variance	24%	8%	10%	15%	6%	6%	11%	17%	21%	19%	17%	13%	14%	12%	16%	12%	1%	11%	11%	15%	20%	18%	22%	5%	20%	13%	6%	8%	2%	1%	16%	14%	18%

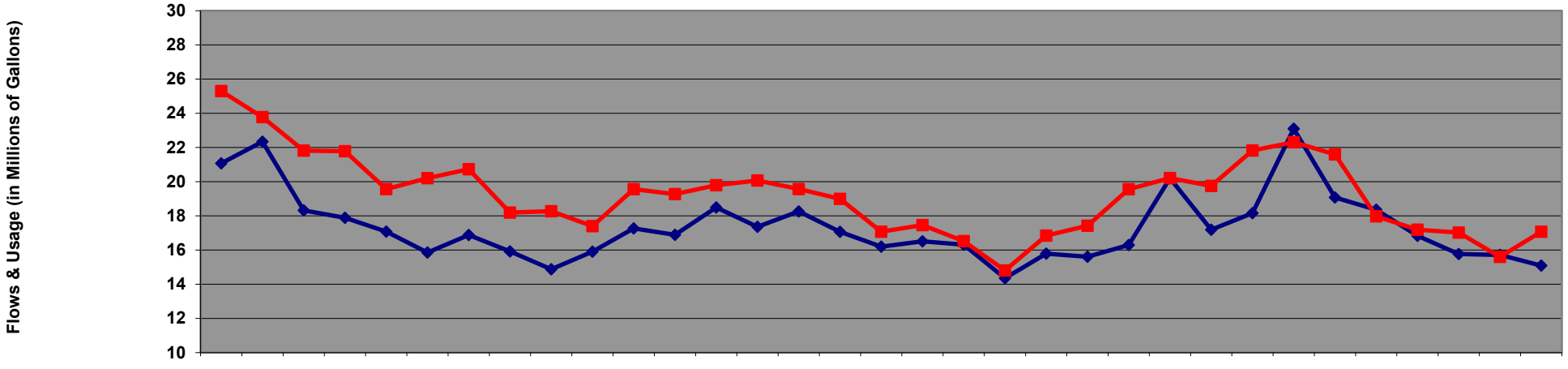
FY 2022, 2023, and 2024 Urban Water Comparison
RWSA Billed Water Charges & ACSA Billed Water Revenues



	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Revenue	$1,43	$1,67	$1,50	$1,41	$1,25	$1,17	$1,16	$1,05	$1,08	$1,11	$1,21	$1,29	$1,51	$1,56	$1,48	$1,45	$1,40	$1,23	$1,26	$1,17	$1,18	$1,30	$1,32	$1,56	$1,66	$1,84	$1,85	$1,73	$1,59	$1,45	$1,39	$1,36	$1,38
RWSA Charges	$795	$793	$772	$768	$713	$695	$711	$691	$715	$717	$736	$738	$831	$840	$905	$841	$794	$789	$799	$782	$817	$830	$842	$838	$1,02	$1,04	$1,01	$1,00	$950	$923	$956	$942	$965
Difference	$645	$877	$728	$642	$539	$479	$453	$360	$368	$399	$483	$559	$683	$726	$576	$615	$608	$445	$468	$390	$370	$472	$482	$723	$642	$803	$836	$726	$648	$536	$438	$421	$416
Fiscal YTD Difference	$0.64	$1.52	$2.25	$2.89	$3.43	$3.91	$4.36	$4.72	$5.09	$5.49	$5.97	$6.53	$0.68	$1.41	$1.98	$2.60	$3.21	$3.65	$4.12	$4.51	$4.88	$5.35	$5.83	$6.56	$0.64	$1.44	$2.28	$3.01	$3.65	$4.19	$4.63	$5.05	$5.47

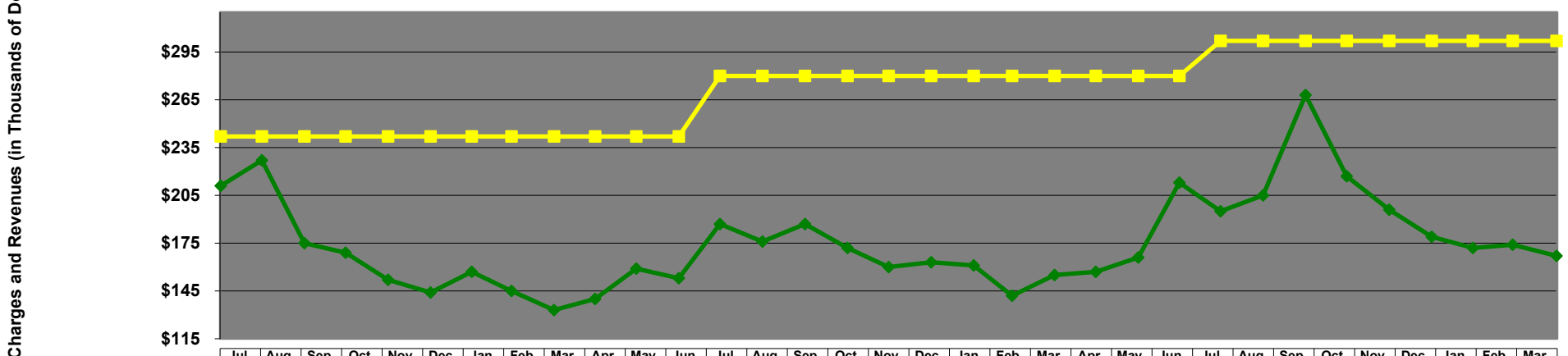
Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

FY 2022, 2023, and 2024 Crozet Water Comparison
RWSA Flows & ACSA Customer Usage



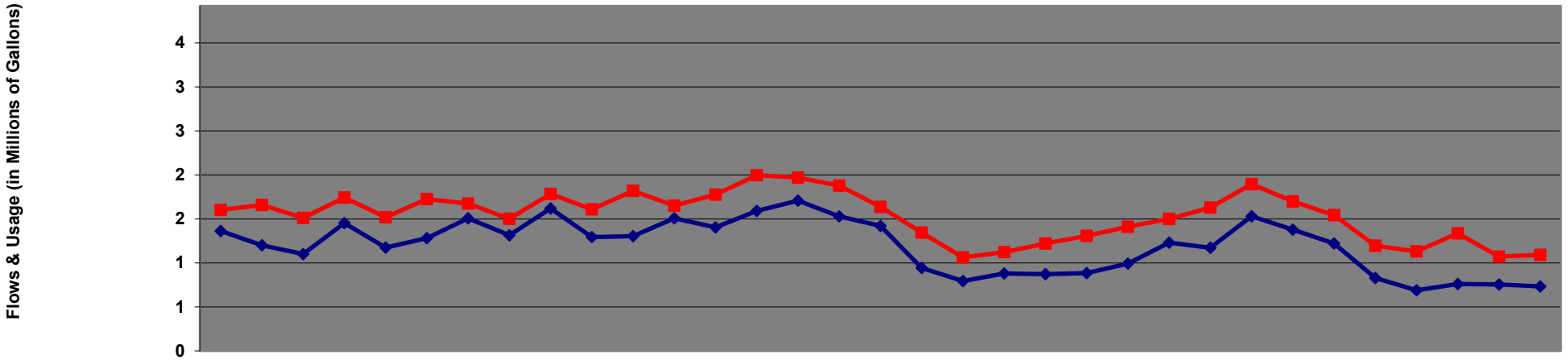
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Usage	21	22	18	18	17	16	17	16	15	16	17	17	18	17	18	17	16	17	16	14	16	16	16	20	17	18	23	19	18	17	16	16	15
RWSA Flows	25	24	22	22	20	20	21	18	18	17	20	19	20	20	20	19	17	17	17	15	17	17	20	20	20	22	22	22	18	17	17	16	17
Variance	20%	6%	19%	22%	15%	27%	23%	14%	23%	9%	13%	14%	7%	16%	7%	11%	5%	6%	1%	3%	7%	12%	20%	0%	15%	20%	-3%	13%	-2%	2%	8%	-1%	13%

FY 2022, 2023, and 2024 Crozet Water Comparison
RWSA Billed Water Charges & ACSA Billed Water Revenues



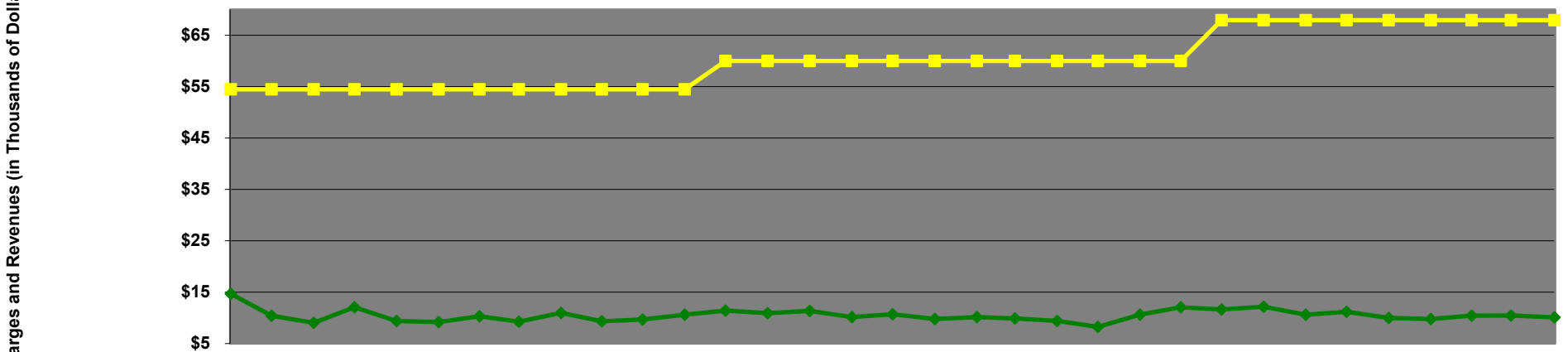
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Revenue	$211	$227	$175	$169	$152	$144	$157	$145	$133	$140	$159	$153	$187	$176	$187	$172	$160	$163	$161	$142	$155	$157	$166	$213	$195	$205	$268	$217	$196	$179	$172	$174	$167
RWSA Charges	$242	$242	$242	$242	$242	$242	$242	$242	$242	$242	$242	$242	$280	$280	$280	$280	$280	$280	$280	$280	$280	$280	$280	$280	$302	$302	$302	$302	$302	$302	$302	$302	$302
Difference	($31)	($15)	($67)	($73)	($90)	($98)	($85)	($97)	($109	($102	($83)	($89)	($93)	($104	($93)	($108	($120	($117	($119	($138	($125	($123	($114	($67)	($107	($97)	($34)	($85)	($106	($123	($130	($128	($135
Fiscal YTD Difference	-$0.0	($0.0	($0.1	($0.1	($0.2	($0.3	($0.4	($0.5	($0.6	($0.7	($0.8	($0.9	$0.0	($0.2	($0.2	($0.4	($0.5	($0.6	($0.7	($0.8	($1.0	($1.1	($1.2	($1.3	($0.1	($0.2	($0.2	($0.3	($0.4	($0.5	($0.6	($0.8	($0.9

FY 2022, 2023, and 2024 Scottsville Water Comparison
RWSA Flows & ACSA Customer Usage



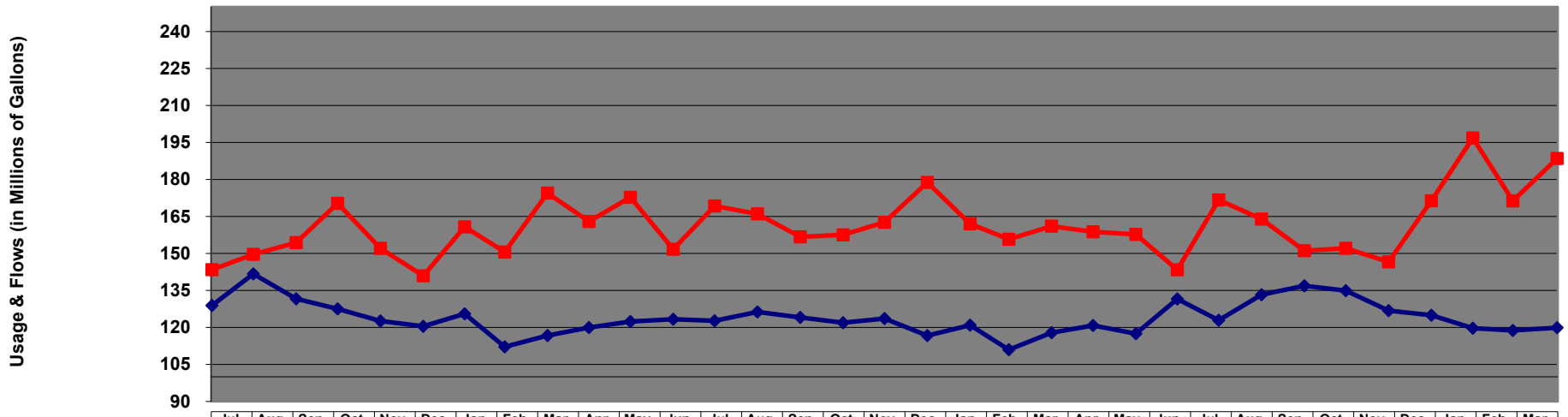
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Usage	1	1	1	2	1	1	2	1	2	1	1	2	1	2	2	2	2	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1
RWSA Flows	1.7	1.7	1.6	1.8	1.6	1.8	1.8	1.6	1.9	1.7	1.9	1.7	1.9	2.1	2.0	2.0	1.7	1.4	1.1	1.2	1.3	1.4	1.5	1.6	1.7	2.0	1.8	1.6	1.3	1.2	1.4	1.2	1.2
Variance	17%	36%	35%	19%	28%	33%	10%	13%	10%	23%	37%	9%	25%	24%	15%	22%	14%	39%	31%	25%	36%	44%	39%	21%	36%	23%	22%	25%	40%	57%	69%	38%	44%

FY 2022, 2023, and 2024 Scottsville Water Comparison
RWSA Billed Water Charges & ACSA Billed Water Revenues



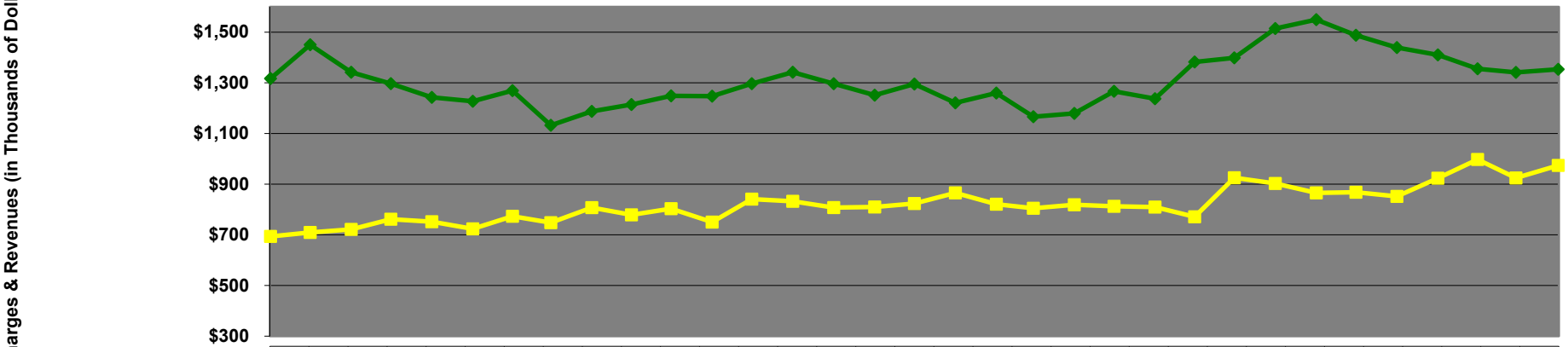
	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Revenue	$15	$10	$9	$12	$9	$9	$10	$9	$11	$9	$10	$11	$11	$11	$11	$10	$11	$10	$10	$10	$9	$8	$11	$12	$12	$12	$11	$11	$10	$10	$10	$10	$10
RWSA Charges	$54	$54	$54	$54	$54	$54	$54	$54	$54	$54	$54	$54	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$60	$68	$68	$68	$68	$68	$68	$68	$68	$68
Difference	-$40	-$44	-$45	-$42	-$45	-$45	-$44	-$45	-$44	-$45	-$45	-$44	-$49	-$49	-$49	-$50	-$49	-$50	-$50	-$50	-$51	-$52	-$49	-$48	-$56	-$56	-$57	-$57	-$58	-$58	-$58	-$57	-$58
Fiscal YTD Difference	-$0.0	($0.0	($0.1	($0.1	($0.2	($0.2	($0.3	($0.3	($0.3	($0.4	($0.4	($0.5	($0.0	($0.1	($0.1	($0.2	($0.2	($0.3	($0.3	($0.4	($0.4	($0.5	($0.5	($0.6	($0.0	($0.1	($0.1	($0.2	($0.2	($0.3	($0.4	($0.4	($0.5

FY 2022, 2023, and 2024 Urban (including Glenmore) & Crozet Sewer Comparison
ACSA Customer Usage & RWSA Flows



	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Usage	129	142	132	128	123	120	126	112	117	120	122	123	123	126	124	122	124	117	121	111	118	121	117	132	123	133	137	135	127	125	120	119	120
RWSA Flows	143	150	154	170	152	141	161	151	174	163	173	152	169	166	157	158	163	179	162	156	161	159	158	143	172	164	151	152	147	171	197	171	189
Variance	11%	6%	17%	34%	24%	17%	28%	34%	50%	36%	41%	23%	38%	32%	26%	29%	32%	53%	34%	40%	37%	31%	34%	9%	40%	23%	10%	13%	16%	37%	64%	44%	57%

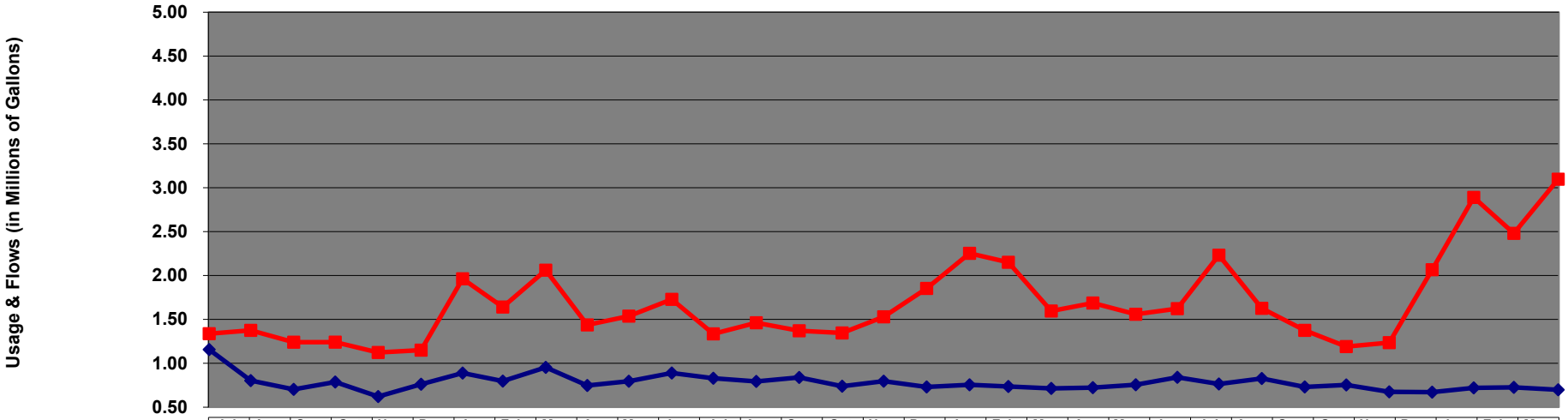
FY 2022, 2023, and 2024 Urban (including Glenmore) & Crozet Sewer Comparison
ACSA Billed Sewer Usage & RWSA Billed Sewer Charges



	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Revenue	$1,31	$1,45	$1,34	$1,29	$1,24	$1,22	$1,26	$1,13	$1,18	$1,21	$1,24	$1,24	$1,29	$1,34	$1,29	$1,25	$1,29	$1,22	$1,25	$1,16	$1,17	$1,26	$1,23	$1,38	$1,39	$1,51	$1,54	$1,48	$1,43	$1,41	$1,35	$1,34	$1,35
RWSA Charges	$694	$709	$721	$762	$752	$724	$773	$748	$807	$779	$803	$750	$841	$832	$807	$810	$823	$865	$821	$805	$819	$813	$809	$771	$925	$903	$865	$868	$852	$923	$998	$924	$974
Difference	$623	$741	$620	$535	$491	$504	$496	$384	$380	$435	$445	$497	$456	$510	$489	$441	$472	$356	$439	$361	$360	$454	$428	$611	$473	$612	$684	$620	$588	$487	$358	$417	$380
Fiscal YTD Difference	$0.62	$1.36	$1.98	$2.52	$3.01	$3.51	$4.01	$4.39	$4.77	$5.21	$5.66	$6.15	$0.46	$0.97	$1.45	$1.90	$2.37	$2.72	$3.16	$3.52	$3.88	$4.34	$4.77	$5.38	$0.47	$1.09	$1.77	$2.39	$2.98	$3.46	$3.82	$4.24	$4.62

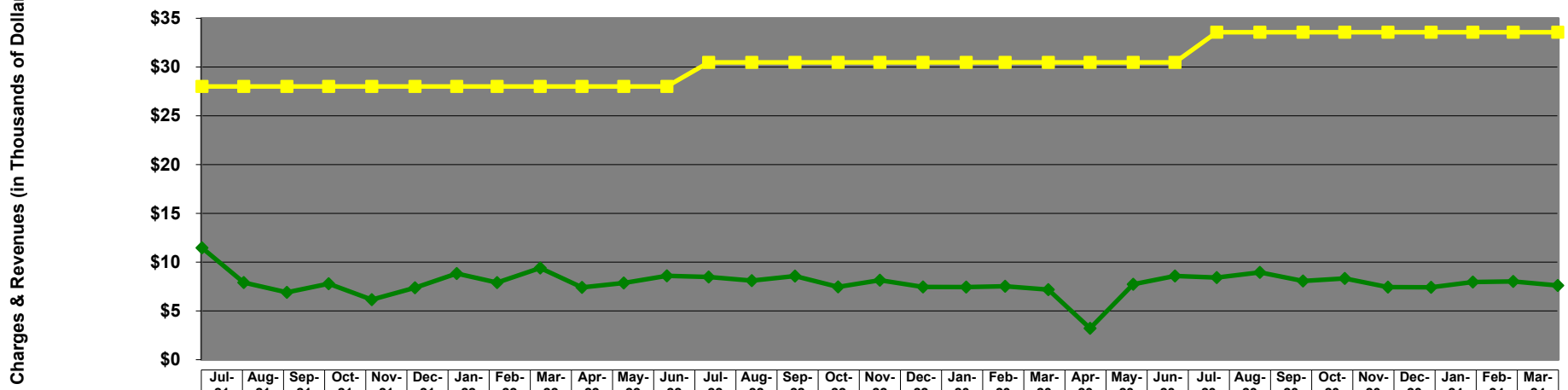
Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

FY 2022, 2023, and 2024 Scottsville Sewer Comparison
ACSA Customer Usage & RWSA Flows



	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Usage	1.16	0.80	0.70	0.79	0.62	0.76	0.89	0.80	0.95	0.75	0.80	0.89	0.83	0.79	0.84	0.74	0.80	0.73	0.75	0.74	0.71	0.72	0.76	0.84	0.76	0.83	0.73	0.75	0.67	0.67	0.72	0.73	0.70
RWSA Flows	1.34	1.38	1.24	1.24	1.12	1.15	1.96	1.64	2.06	1.44	1.54	1.73	1.34	1.46	1.37	1.35	1.53	1.85	2.25	2.15	1.60	1.69	1.56	1.62	2.23	1.63	1.38	1.19	1.24	2.07	2.89	2.48	3.10
Variance	16%	71%	77%	58%	81%	51%	121%	106%	116%	92%	93%	94%	61%	84%	63%	82%	92%	154%	198%	192%	124%	133%	106%	93%	192%	97%	88%	58%	83%	208%	301%	242%	344%

FY 2022, 2023, and 2024 Scottsville Sewer Comparison
ACSA Billed Sewer Usage & RWSA Billed Sewer Charges



	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24
ACSA Revenue	$11.4	$7.91	$6.91	$7.79	$6.16	$7.38	$8.83	$7.91	$9.40	$7.41	$7.87	$8.60	$8.48	$8.11	$8.57	$7.47	$8.15	$7.46	$7.44	$7.53	$7.19	$3.22	$7.74	$8.58	$8.42	$8.95	$8.07	$8.33	$7.44	$7.42	$7.96	$8.02	$7.61
RWSA Charges	$28	$28	$28	$28	$28	$28	$28	$28	$28	$28	$28	$28	$30	$30	$30	$30	$30	$30	$30	$30	$30	$30	$30	$30	$34	$34	$34	$34	$34	$34	$34	$34	$34
Difference	-$17	-$20	-$21	-$20	-$22	-$21	-$19	-$20	-$19	-$21	-$20	-$19	-$22	-$22	-$22	-$23	-$22	-$23	-$23	-$23	-$23	-$27	-$23	-$22	-$25	-$25	-$25	-$25	-$26	-$26	-$26	-$26	-$26
Fiscal YTD Difference	-$0.0	-$0.0	-$0.0	-$0.0	-$0.1	-$0.1	-$0.1	-$0.1	-$0.1	-$0.2	-$0.2	-$0.2	-$0.0	-$0.0	-$0.0	-$0.0	-$0.1	-$0.1	-$0.1	-$0.1	-$0.2	-$0.2	-$0.2	-$0.2	-$0.0	-$0.0	-$0.0	-$0.1	-$0.1	-$0.1	-$0.1	-$0.2	-$0.2

Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

Single-Family Residential Water Usage

(Including irrigation through exclusion, irrigation, and auxiliary meters)

	FY 2022											
	July	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
Level 1 (0 - 3,000 gallons)	45,715,768	46,650,649	45,763,766	45,032,204	45,171,862	45,419,967	45,519,835	43,528,147	44,213,375	44,847,991	45,928,802	46,038,996
Level 2 (3,001 - 6,000 gallons)	18,273,794	20,170,499	17,049,266	15,725,032	15,151,382	14,875,487	15,122,551	12,929,554	12,730,722	13,260,281	16,086,013	16,576,525
Level 3 (6,001 - 9,000 gallons)	6,123,440	7,439,890	5,100,810	4,617,427	3,808,811	2,996,781	3,076,904	2,659,279	2,230,016	2,424,233	3,744,303	4,334,397
Level 4 (over 9,000 gallons)	8,544,212	14,373,474	7,815,394	7,173,929	4,280,811	2,811,464	3,100,290	2,921,259	1,746,818	1,865,133	3,644,494	5,309,110
Total	**78,657,214**	**88,634,512**	**75,729,236**	**72,548,592**	**68,412,866**	**66,103,699**	**66,819,580**	**62,038,239**	**60,920,931**	**62,397,638**	**69,403,612**	**72,259,028**

	FY 2023											
	July	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
Level 1 (0 - 3,000 gallons)	45,599,911	45,505,082	45,632,349	45,357,143	45,992,076	45,339,022	45,820,263	44,448,040	45,016,715	45,670,222	45,561,576	49,568,558
Level 2 (3,001 - 6,000 gallons)	16,363,636	15,612,084	15,525,446	15,374,370	15,677,968	13,744,408	14,908,443	12,546,428	13,038,674	13,819,163	14,442,933	18,264,878
Level 3 (6,001 - 9,000 gallons)	4,849,724	4,363,645	4,161,371	4,369,132	3,918,235	2,545,163	2,943,662	2,117,866	2,182,828	2,638,653	3,330,195	5,919,761
Level 4 (over 9,000 gallons)	7,208,522	6,639,465	6,037,842	6,071,945	4,079,700	2,079,589	2,271,075	1,540,953	1,196,536	1,979,431	3,435,895	6,675,863
Total	**74,021,793**	**72,120,276**	**71,357,008**	**71,172,590**	**69,667,979**	**63,708,182**	**65,943,443**	**60,653,287**	**61,434,753**	**64,107,469**	**66,770,599**	**80,429,060**

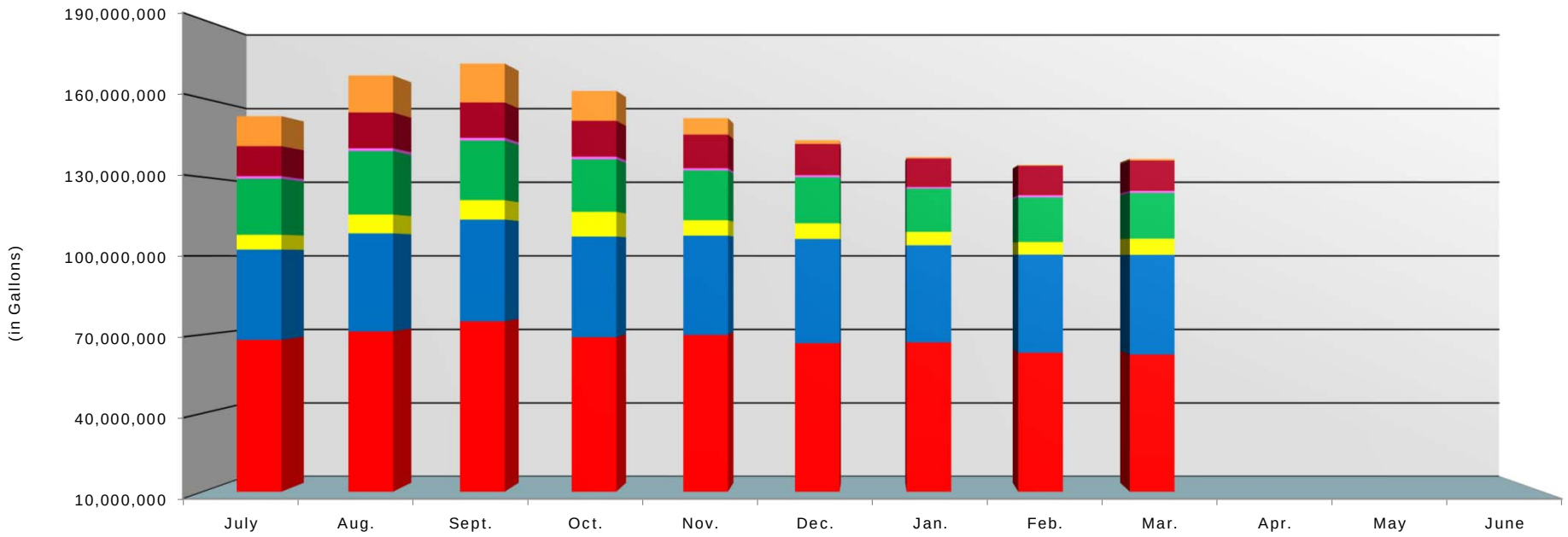
	FY 2024											
	July	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
Level 1 (0 - 3,000 gallons)	46,186,939	46,955,054	47,747,914	46,680,010	47,232,775	46,900,575	46,887,506	45,996,822	45,827,255			
Level 2 (3,001 - 6,000 gallons)	15,834,490	16,832,305	18,509,951	15,902,249	16,363,806	14,914,361	15,260,215	13,399,431	13,147,547			
Level 3 (6,001 - 9,000 gallons)	4,271,446	4,916,430	6,033,699	4,583,776	4,409,091	2,899,484	2,944,132	2,249,613	2,237,129			
Level 4 (over 9,000 gallons)	5,743,519	6,973,528	8,880,933	6,336,335	4,866,834	2,138,821	1,860,892	1,447,502	1,143,464			
Total	**72,036,394**	**75,677,317**	**81,172,497**	**73,502,370**	**72,872,506**	**66,853,241**	**66,952,745**	**63,093,368**	**62,355,395**	**-**	**-**	**-**

System-Wide Irrigation Water Usage

(All usage measured through exclusion, irrigation, and auxiliary meters)

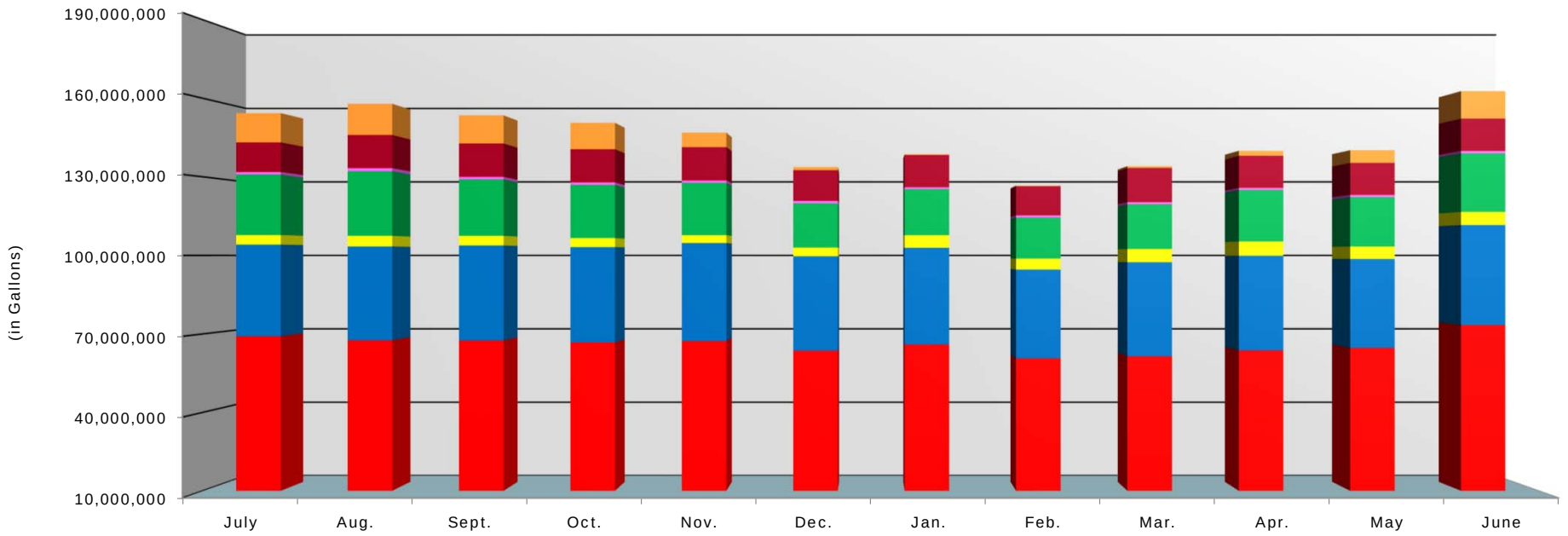
FY 2024	**July**	**August**	**September**	**October**	**November**	**December**	**January**	**February**	**March**	**April**	**May**	**June**
Level 1 (0 - 3,000 gallons)	145,819	127,806	38,463	168,299	23,781	1,101	616	3	326			
Level 2 (3,001 - 6,000 gallons)	657,224	542,994	149,091	685,181	93,892	2,523	994	2	2,184			
Level 3 (6,001 - 9,000 gallons)	717,195	648,971	222,722	787,674	113,745	6,614	1,802	1,600	250			
Level 4 (over 9,000 gallons)	9,936,298	12,779,016	14,436,869	9,782,999	6,025,018	1,459,471	495,474	332,886	635,405			
Total	**11,456,536**	**14,098,787**	**14,847,145**	**11,424,153**	**6,256,436**	**1,469,709**	**498,886**	**334,491**	**638,165**	**-**	**-**	**-**

Monthly Water Consumption Fiscal Year 2024

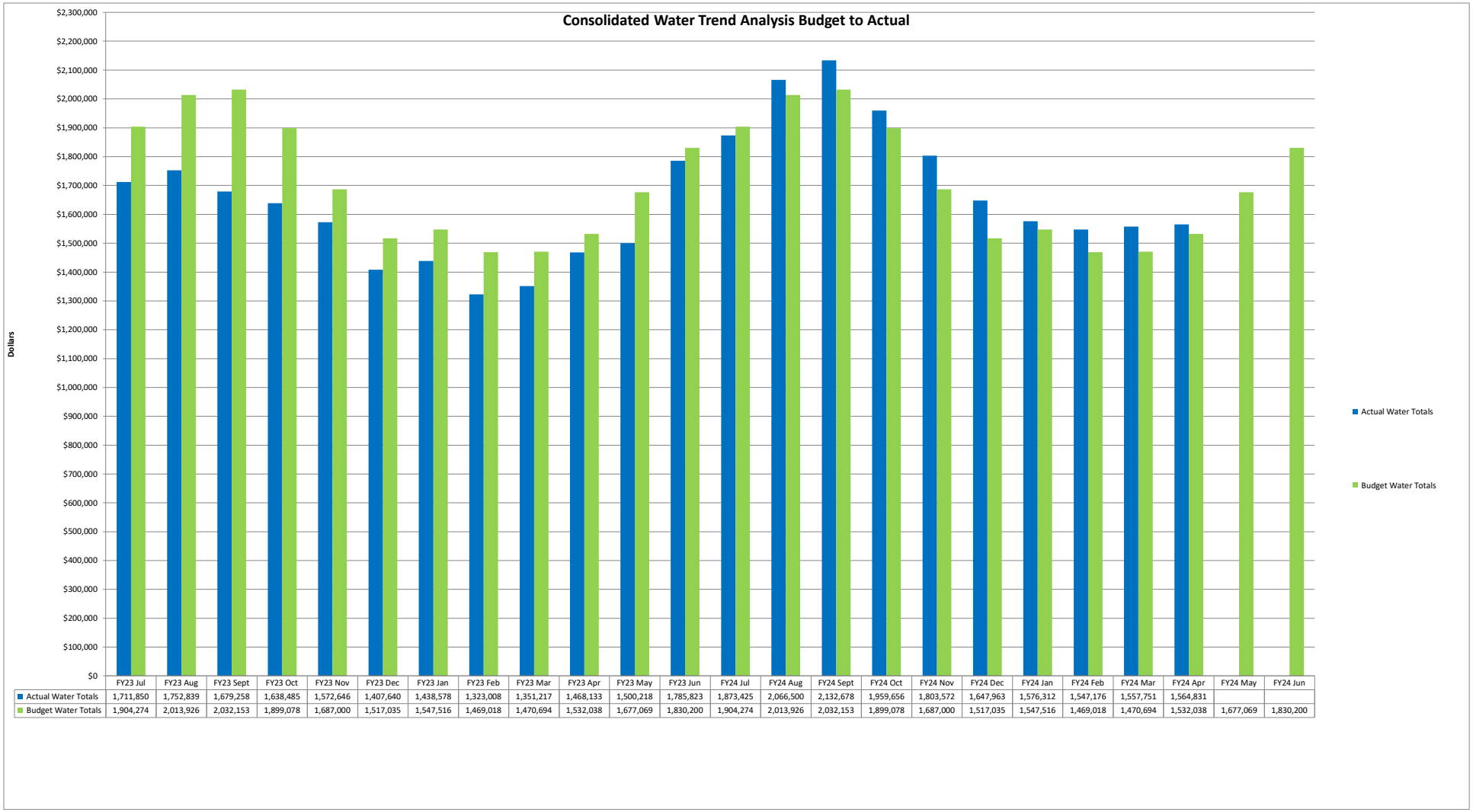


	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
% Irrigation to total	7.48%	8.35%	8.57%	7.01%	4.10%	1.02%	0.36%	0.25%	0.47%	0.00%	0.00%	0.00%
Total Irrigation	11,456,536	14,098,787	14,847,145	11,424,153	6,256,436	1,469,709	498,886	334,491	638,165	0	0	0
Institutional - Domestic Consumption	11,422,399	13,645,824	13,463,936	13,656,468	12,824,386	11,907,305	10,858,597	11,228,113	11,589,322			
Industrial - Domestic/Processing less Exclusion	966,653	1,077,656	1,057,633	1,026,110	861,358	803,364	609,853	850,907	820,801			
Comm. (Other) - Domestic Consumption	21,360,672	24,192,909	22,706,395	19,990,643	18,980,282	17,518,883	16,504,729	16,999,535	17,370,595			
Offices - Domestic Consumption	5,673,746	7,197,381	7,399,598	9,429,273	5,856,409	5,992,764	5,129,796	4,792,091	6,193,567			
MFR - Domestic Consumption	34,431,191	37,357,730	38,794,918	38,384,145	37,854,340	39,754,868	37,028,178	37,421,461	37,990,377			
SFR - Domestic Consumption	67,945,359	71,189,646	75,030,729	68,975,926	69,843,962	66,666,670	66,994,095	63,050,754	62,387,420			

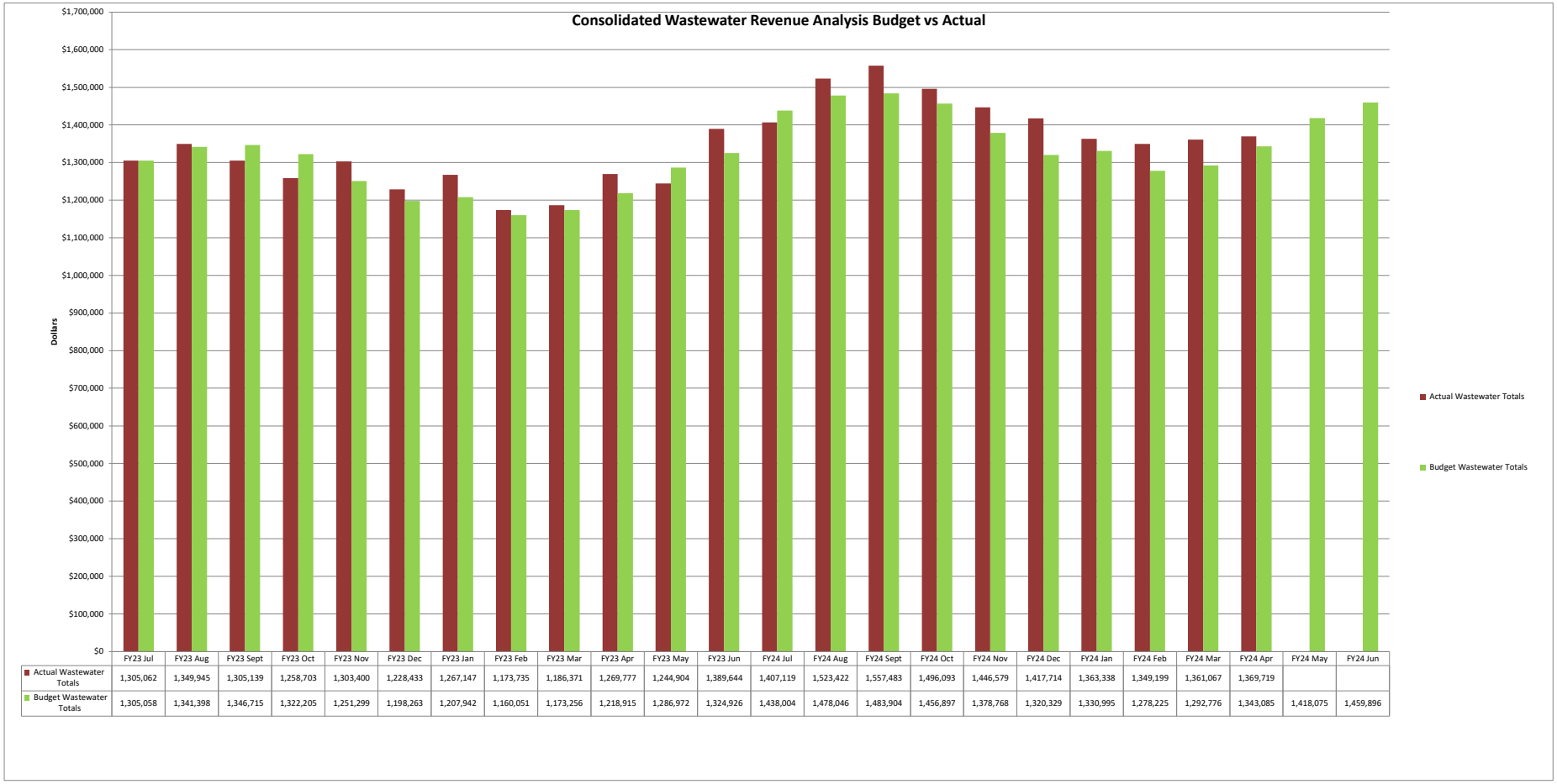
Monthly Water Consumption Fiscal Year 2023



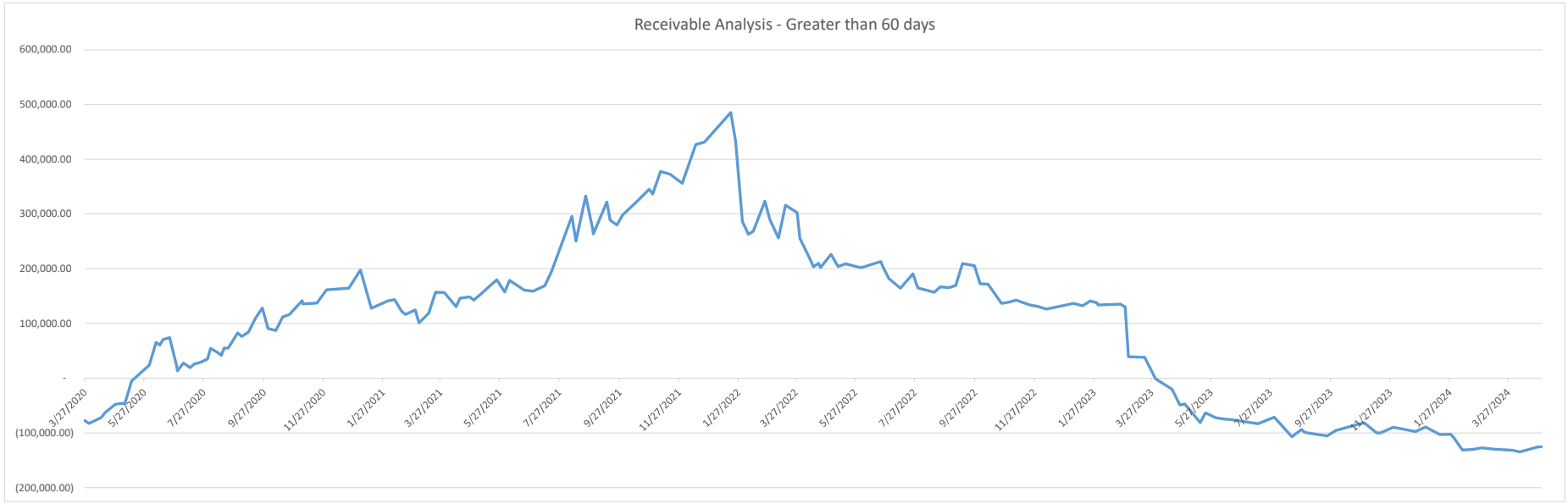
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
% Irrigation to total	7.24%	7.54%	7.02%	6.70%	3.75%	0.90%	0.27%	0.18%	0.51%	1.36%	3.47%	6.45%
Total Irrigation	11,175,137	11,900,819	10,767,652	10,097,825	5,513,080	1,200,380	370,153	225,619	689,416	1,908,740	4,869,864	10,490,124
Institutional - Domestic Consumption	11,319,291	12,674,993	12,747,929	12,683,947	12,771,652	11,778,793	12,305,045	11,134,031	13,057,616	12,263,090	12,218,396	12,337,143
Industrial	939,061	1,164,077	948,893	933,427	833,612	906,243	709,399	816,705	829,201	805,519	830,656	936,327
Comm. (Other) - Domestic Consumption	23,118,746	24,680,610	21,554,311	20,295,040	20,004,641	16,893,115	17,593,408	15,700,570	17,024,057	19,665,123	18,854,669	22,334,104
Offices - Domestic Consumption	3,674,283	4,083,421	3,700,076	3,470,304	3,043,916	3,329,037	4,809,082	4,181,660	5,081,625	5,429,341	4,775,154	5,049,815
MFR - Domestic Consumption	34,974,805	35,804,051	36,296,110	36,410,800	37,401,009	36,056,416	36,927,115	33,914,329	35,931,334	36,171,544	33,952,020	38,160,782
SFR - Domestic Consumption	69,126,793	67,577,187	67,479,481	66,746,613	67,286,795	63,599,125	65,965,821	60,663,343	61,452,363	63,693,336	64,662,691	73,419,384



	FY23 Jul	FY23 Aug	FY23 Sept	FY23 Oct	FY23 Nov	FY23 Dec	FY23 Jan	FY23 Feb	FY23 Mar	FY23 Apr	FY23 May	FY23 Jun	FY24 Jul	FY24 Aug	FY24 Sept	FY24 Oct	FY24 Nov	FY24 Dec	FY24 Jan	FY24 Feb	FY24 Mar	FY24 Apr	FY24 May	FY24 Jun
Actual Water Totals	1,711,850	1,752,839	1,679,258	1,638,485	1,572,646	1,407,640	1,438,578	1,323,008	1,351,217	1,468,133	1,500,218	1,785,823	1,873,425	2,066,500	2,132,678	1,959,656	1,803,572	1,647,963	1,576,312	1,547,176	1,557,751	1,564,831		
Budget Water Totals	1,904,274	2,013,926	2,032,153	1,899,078	1,687,000	1,517,035	1,547,516	1,469,018	1,470,694	1,532,038	1,677,069	1,830,200	1,904,274	2,013,926	2,032,153	1,899,078	1,687,000	1,517,035	1,547,516	1,469,018	1,470,694	1,532,038	1,677,069	1,830,200



	FY23 Jul	FY23 Aug	FY23 Sept	FY23 Oct	FY23 Nov	FY23 Dec	FY23 Jan	FY23 Feb	FY23 Mar	FY23 Apr	FY23 May	FY23 Jun	FY24 Jul	FY24 Aug	FY24 Sept	FY24 Oct	FY24 Nov	FY24 Dec	FY24 Jan	FY24 Feb	FY24 Mar	FY24 Apr	FY24 May	FY24 Jun
Actual Wastewater Totals	1,305,062	1,349,945	1,305,139	1,258,703	1,303,400	1,228,433	1,267,147	1,173,735	1,186,371	1,269,777	1,244,904	1,389,644	1,407,119	1,523,422	1,557,483	1,496,093	1,446,579	1,417,714	1,363,338	1,349,199	1,361,067	1,369,719		
Budget Wastewater Totals	1,305,058	1,341,398	1,346,715	1,322,205	1,251,299	1,198,263	1,207,942	1,160,051	1,173,256	1,218,915	1,286,972	1,324,926	1,438,004	1,478,046	1,483,904	1,456,897	1,378,768	1,320,329	1,330,995	1,278,225	1,292,776	1,343,085	1,418,075	1,459,896


Receivable Analysis - Greater than 60 days
600,000.00
500,000.00
400,000.00
300,000.00
200,000.00
100,000.00
-
(100,000.00)
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3/27/2023
5/27/2023
7/27/2023
9/27/2023
11/27/2023
1/27/2024
3/27/2024

Albemarle County Service Authority
April 2024 Payments

CHECK NUMBER	CHECK DATE	VENDOR NAME	AMOUNT	DESCRIPTION OVER $5,000
Wire	04/08/2024	Rivanna Water & Sewer Authority	2,342,273.20	Water & Sewer Treatment
69084	04/01/2024	Fire-X Corporation	283,574.05	Fire Suppression System
ACH	04/30/2024	Payroll	177,889.73	Net Pay
ACH	04/15/2024	Payroll	177,023.71	Net Pay
69069	04/01/2024	Core & Main LP	106,734.16	AMI
69229	04/18/2024	Tyler Technologies Incorporated	77,841.00	Annual Munis SAAS
495982098	04/30/2024	IRS - Federal Tax Deposit	65,271.16	Payroll
495982085	04/15/2024	IRS - Federal Tax Deposit	65,260.18	Payroll
Wire	04/26/2024	The Bank of New York Mellon	47,929.90	Debt Service
69073	04/01/2024	Cummins Incorporated	45,112.90	North Fork Generator Radiator
495982097	04/30/2024	County of Albemarle	42,073.85	Payroll
495982084	04/30/2024	County of Albemarle	39,941.07	Payroll
69199	04/15/2024	Prism Contractors	36,515.48	Sewer Rehabilitation
69127	04/01/2024	Validos LLC	35,183.14	CIS/Website/Telephone
495982081	04/30/2024	Virginia Retirement System	32,825.30	Payroll
495982094	04/30/2024	Virginia Retirement System	32,825.24	Payroll
69107	04/01/2024	Paymentus Corporation	27,762.47	Transaction Fees
69167	04/15/2024	Ferguson US Holdings Inc	27,449.11	Inventory
69086	04/01/2024	AGILIS LLC	22,332.65	Exclusion Meter Conversion
69160	04/15/2024	Daly Computers Incorporated	22,185.00	Office 365 G3 GCC Renewal
69172	04/15/2024	Fortiline Incorporated	20,937.25	Inventory
69121	04/01/2024	Sensible Incorporated	18,267.00	Installation of HVAC - PS
69200	04/15/2024	Provantage LLC	17,550.00	Replace servers & hard drives
69148	04/15/2024	Bank of America	16,575.25	Supplies & Memberships
69079	04/01/2024	Electrical Equipment Company	13,286.00	TechConnect Support
69118	04/01/2024	RSG Landscaping LLC	13,201.71	Landscaping
69209	04/15/2024	Sensible Incorporated	12,178.00	Installation of HVAC - PS
495982086	04/15/2024	Virginia Dept of Taxation	11,150.58	Payroll
495982099	04/30/2024	Virginia Dept of Taxation	11,039.58	Payroll
69221	04/15/2024	Cellco Partnership	10,725.08	Cellular Service
69109	04/01/2024	Provantage LLC	10,140.00	CISCO 10G Base SFPs
69183	04/15/2024	Lenny Campbell Service Company I	10,000.00	FuelMaster Upgrade - Deposit
69216	04/15/2024	U S Postmaster	10,000.00	Bulk Mail Postage Permit 205
69087	04/01/2024	Fortiline Incorporated	9,205.89	Inventory
69076	04/01/2024	Duncan Parnell	8,550.00	FieldPoint Subscripting
69062	04/01/2024	Bentley Systems Incorporated	7,734.59	Software Renewal
69219	04/15/2024	Validos LLC	7,310.00	CIS/Website/Telephone
69184	04/15/2024	Letterpress Communications LLC	6,750.00	Communications Consultant
69098	04/01/2024	Mansfield Oil Company of Gainesvi	6,243.82	Fuel
69191	04/15/2024	MSB Coach	6,120.19	Team Coaching
69163	04/15/2024	Dominion Energy Virginia	5,442.56	Energy
69171	04/15/2024	Flora Pettit PC	5,437.50	Legal Services
69110	04/01/2024	Ramboll Americas Engineering	5,233.71	Briarwood Water Main
495982083	04/15/2024	VALIC	5,147.50	Payroll

495982096	04/30/2024	VALIC	5,147.50	Payroll
69227	04/18/2024	Caliber Holdings LLC	4,986.25	
69075	04/01/2024	Dominion Energy Virginia	4,937.22	
69198	04/15/2024	The Pitney Bowes Bank Incorporate	4,900.00	
69072	04/01/2024	Cues Incorporated	4,690.59	
495982080	04/15/2024	Nationwide	4,515.65	
495982093	04/30/2024	Nationwide	4,515.65	
69081	04/01/2024	Evoqua Water Technologies LLC	4,463.46	
69188	04/15/2024	Mansfield Oil Company of Gainesvi	4,256.51	
69077	04/01/2024	Ed's Floor Care Services LLC	3,703.33	
69178	04/15/2024	Hydraflo Incorporated	3,641.55	
69165	04/15/2024	E Source Companies LLC	3,546.00	
495982078	04/15/2024	ICMA Membership Renewals	3,539.48	
495982091	04/30/2024	ICMA Membership Renewals	3,539.48	
69192	04/15/2024	ODP Business Solutions LLC	3,468.34	
69185	04/15/2024	Lowe's	3,224.78	
69149	04/15/2024	Beverage Tractor & Equipment LLC	3,114.96	
69218	04/15/2024	UVA-WorkMed	3,062.00	
69197	04/15/2024	PFM Asset Management LLC	2,863.23	
69164	04/15/2024	BSC Acquisition Sub LLC	2,850.00	
69133	04/01/2024	Whitman, Requardt & Assoc LLP	2,715.75	
69053	04/01/2024	Foothill Lawn Service Inc	2,684.00	
69208	04/15/2024	See-Mor Truck Tops & Customs Inc	2,575.16	
69089	04/01/2024	Granicus LLC	2,568.00	
69214	04/15/2024	Traffic Safety Supplies LLC	2,185.00	
69080	04/01/2024	EWT Holdings III Corporation	2,112.54	
69125	04/01/2024	UniFirst Corporation	2,073.92	
69095	04/01/2024	Mailing Services of Virginia	2,039.28	
69217	04/15/2024	UniFirst Corporation	2,037.14	
69116	04/01/2024	Rivanna Conservation Alliance	2,000.00	
69305	04/30/2024	Minnesota Life Insurance Co	1,911.14	
69303	04/30/2024	Guardian	1,871.18	
69222	04/15/2024	VA Utility Protection Service Inc	1,835.40	
69228	04/18/2024	Ferguson US Holdings Inc	1,791.63	
69166	04/15/2024	Environmental Systems Research In	1,750.00	
69141	04/01/2024	Comcast	1,727.46	
495982088	04/15/2024	ACSA Flexible Spending	1,573.15	
495982101	04/30/2024	ACSA Flexible Spending	1,573.15	
69083	04/01/2024	Ferguson US Holdings Inc	1,565.90	
69111	04/01/2024	Rappahannock Electric Cooperative	1,561.10	
69093	04/01/2024	L/B Water Service Incorporated	1,475.22	
69145	04/15/2024	Albemarle Lock & Safe Company	1,425.00	
495982087	04/15/2024	Flexible Benefit	1,397.50	
495982100	04/30/2024	Flexible Benefit	1,397.50	
69190	04/15/2024	McClung Printing Incorporated	1,320.00	
69143	04/15/2024	Foothill Lawn Service Inc	1,272.00	
69070	04/01/2024	Albemarle Circuit Court	1,200.00	

69115	04/01/2024	Stephen M Lestyan	1,050.00
69205	04/15/2024	Rivanna Water & Sewer Authority	970.08
69204	04/15/2024	Rivanna Solid Waste Authority	943.00
69201	04/15/2024	Republic Services	920.36
69061	04/01/2024	Bailey Printing Incorporated	911.00
69132	04/01/2024	Eve Watters	900.00
69202	04/15/2024	Stephen M Lestyan	900.00
69158	04/15/2024	Commonwealth Garage Door	890.00
495982089	04/30/2024	VACORP	856.95
69120	04/01/2024	S L Williamson Company Inc	849.42
69117	04/01/2024	Rocktown Excavating	800.00
69206	04/15/2024	Rockingham Precast Incorporated	780.00
495982082	04/30/2024	AFLAC	778.32
495982095	04/30/2024	AFLAC	778.32
69058	04/01/2024	Anderson Construction Incorporate	770.00
69074	04/01/2024	Mark Delp	766.27
69068	04/01/2024	Comcast	753.74
69182	04/15/2024	LB Technology Incorporated	700.00
495982079	04/30/2024	ACAC	639.00
495982092	04/30/2024	ACAC	639.00
69078	04/01/2024	Education & Training Services	549.00
69071	04/01/2024	Crown Castle	546.36
69113	04/01/2024	Rexel USA Incorporated	517.74
69126	04/01/2024	University Tire & Auto	474.17
69159	04/15/2024	Lee Enterprises Incorporated	456.71
69108	04/01/2024	Pitney Bowes Global	441.60
69207	04/15/2024	S L Williamson Company Inc	418.19
69055	04/01/2024	Advance Stores Company Inc	412.28
69230	04/18/2024	Protocol SSD Corporation	401.65
69100	04/01/2024	Motorola Solutions Incorporated	397.28
69101	04/01/2024	ODP Business Solutions LLC	395.01
69161	04/15/2024	Harris Systems USA Incorporated	360.00
69063	04/01/2024	Brink's Incorporated	345.95
69223	04/15/2024	Protocol SSD Corporation	338.57
69215	04/15/2024	U. S. Bank	322.60
69066	04/01/2024	BRC Enterprises Incorporated	306.00
69173	04/15/2024	Nichole Gibson	296.77
69131	04/01/2024	Virginia Dept of Transportation	280.00
69114	04/01/2024	Ricoh USA Incorporated	275.00
69180	04/15/2024	Wisconsin Quick Lube Inc	267.23
69175	04/15/2024	Micheal Gray	264.02
69153	04/15/2024	Indpndnt Bttry Retailers of America	253.56
69144	04/15/2024	Advance Stores Company Inc	253.23
69151	04/15/2024	Marcella Brideson	245.11
69060	04/01/2024	API Service Center	234.95
69174	04/15/2024	Gingerich Outdoor Power Spec	227.07
69210	04/15/2024	CM Turf	224.00

69150	04/15/2024	Blue Sky Property Management	218.46
69225	04/15/2024	William A Wells	210.00
69220	04/15/2024	VAMAC Incorporated	202.63
69128	04/01/2024	Virginia Dept of Transportation	200.00
69090	04/01/2024	Hathaway Solutions LLC	198.90
69054	04/01/2024	ABC Extinguishers LLC	194.19
495982077	04/15/2024	Treasurer of Virginia	189.94
495982090	04/30/2024	Treasurer of Virginia	189.94
69203	04/15/2024	Rivanna Associates Incorporated	188.00
69092	04/01/2024	Richard A Lawson	177.74
69134	04/01/2024	William A Wells	175.00
69112	04/01/2024	Red Wing Business Advantage Acc	172.19
69212	04/15/2024	Macro Retailing LLC	170.98
69094	04/01/2024	Luck Stone Corporation	169.00
69091	04/01/2024	Wisconsin Quick Lube Inc	165.94
69057	04/01/2024	American Pest Incorporated	154.36
69304	04/30/2024	Herbert Beskin Trustee	135.00
69186	04/15/2024	Luck Stone Corporation	127.79
69146	04/15/2024	American Pest Incorporated	123.78
69129	04/01/2024	Virginia Dept of Transportation	120.00
69306	04/30/2024	Snap Fitness	119.88
69099	04/01/2024	Kelly Mason	115.31
69130	04/01/2024	Virginia Dept of Transportation	110.00
69226	04/15/2024	WA Wells Excavating, LLC	105.00
69102	04/01/2024	Neal Donaldson	100.00
69103	04/01/2024	Neal Donaldson	100.00
69104	04/01/2024	Karen and Ashish Singh	100.00
69105	04/01/2024	Katie Harper	100.00
69106	04/01/2024	William B. Scott, Jr.	100.00
69123	04/01/2024	Commonwealth of Virginia DPOR	100.00
69124	04/01/2024	Commonwealth of Virginia DPOR	100.00
69147	04/15/2024	Aqua Air Laboratories Inc	100.00
69194	04/15/2024	Helen McGrath	100.00
69195	04/15/2024	Leslie Richmond	100.00
69196	04/15/2024	Neal Donaldson	100.00
69224	04/15/2024	Andrew Wicks	93.27
69189	04/15/2024	Nick Martsolf	90.20
69170	04/15/2024	Flexible Benefit Administrators Inc	89.00
69169	04/15/2024	Fisher Auto Parts Incorporated	86.17
69156	04/15/2024	City of Charlottesville	84.66
69302	04/30/2024	Anytime Fitness-Pantops	80.00
69065	04/01/2024	Culpeper Auto Parts Incorporated	74.90
69155	04/15/2024	Sandra Citron	74.16
69056	04/01/2024	BPB Holding Corporation	73.07
69059	04/01/2024	Lisa Anderson	72.86
69176	04/15/2024	Greenwood Homes	70.76
69122	04/01/2024	Commonwealth of Virginia DPOR	70.00

69179	04/15/2024	James River Communications Inc	70.00
69162	04/15/2024	Document Destruction of	69.95
69097	04/01/2024	Malloy Ford	63.34
69157	04/15/2024	Nan Coleman	62.84
69119	04/01/2024	Elizabeth Russamano	61.32
69187	04/15/2024	Malloy Chevrolet Charlottesville LL	51.00
69177	04/15/2024	Shirley Holden	50.82
69085	04/01/2024	Flexible Benefit Administrators Inc	42.35
69082	04/01/2024	FedEx	40.27
69142	04/01/2024	Appalachian Power	38.47
69154	04/15/2024	Central Virginia Electric Cooperativ	36.64
69193	04/15/2024	Christopher Ragland	32.00
69067	04/01/2024	City of Charlottesville	26.78
69168	04/15/2024	First Rate Realty	24.60
69088	04/01/2024	Gingerich Outdoor Power Spec	21.99
69096	04/01/2024	Malloy Chevrolet Charlottesville LL	20.00
69152	04/15/2024	MWP Supply Incorporated	19.97
69213	04/15/2024	Thryv Incorporated	6.50
69181	04/15/2024	John Deere Financial	4.94
69211	04/15/2024	Heidi Stone	4.65
69064	04/01/2024	MWP Supply Incorporated	4.25
			4,117,678.88

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2024 Capital Improvement Program (CIP) Report	**AGENDA DATE:** May 16, 2024
STAFF CONTACT(S)/PREPARER: Jeremy M. Lynn, P.E., Director of Engineering	**CONSENT AGENDA:** **ACTION:** ■ **INFORMATION:** ■ **ATTACHMENTS:** YES

BACKGROUND: Monthly CIP Memo including a status report on active CIP Projects and a list of Active Private Development Projects.

DISCUSSION:

- Questions about the status of active CIP Projects.
- Questions about the status of active Private Development Projects.

BUDGET IMPACT: None.

RECOMMENDATIONS: None.

BOARD ACTION REQUESTED: Approval of the Consent Agenda.

ATTACHMENTS:

- Monthly CIP Report
- List of Active Private Development Projects

Albemarle County Service Authority (ACSA)
Capital Improvement Project Report
May 2024

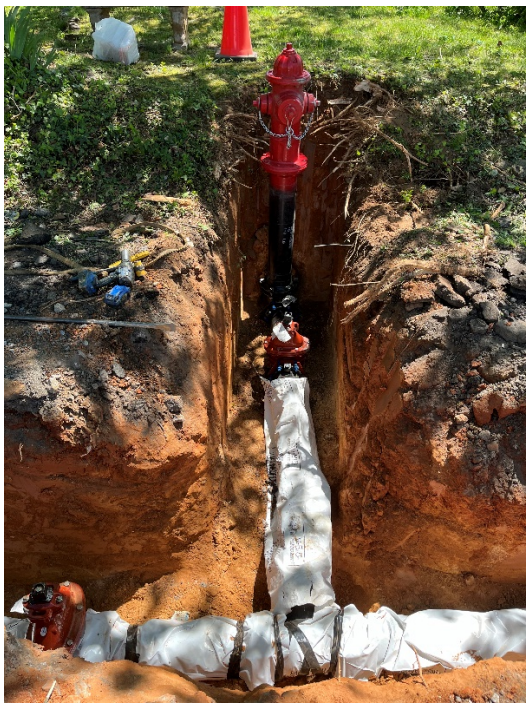
Water System CIP Projects

1. Crozet Phase 4 Water Main Replacement (Account Code 1756):

Consultant:	Michael Baker International, Inc. (Baker)
Project Status:	Construction
Percent Complete:	5%
Contractor:	Valley Contracting, LLC
Construction Start:	January 2024
Completion:	September 2025
Total Budget:	$6,534,400
Appropriated Funds:	$7,064,424

Project Description: This project continues our systematic program to replace the aging and undersized asbestos-cement and PVC water mains in the Crozet Water System. Roads impacted by water replacement work include Crozet Avenue (Route 240), Rockfish Gap Turnpike (Route 250), Hillsboro Lane, Brownsville Road, and the neighborhood streets in Park View. This is the fourth of five phases that have been defined to carry out these improvements.

5/7/2024: Valley has completed the installation of the water main along Hillsboro Lane and is currently installing water services. A second crew is continuing to install the new water main along Rockfish Gap Turnpike.



2. <u>Scottsville Phase 4 Water Main Replacement (Account Code 1758)</u>:

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Design
Percent Complete:	90%
Contractor:	Undetermined
Construction Start:	2024
Completion:	2026
Total Budget:	$6,804,900
Appropriated Funds:	$608,690

Project Description: This project continues our systematic program to replace undersized and deteriorating asbestos-cement and cast-iron water mains throughout our water distribution system. Roads impacted by water replacement work include James River Road, Warren Street, Hardware Street, Moores Hill, and the downtown streets of Page, Bird, and West Main. This project requires extensive coordination with the Rivanna Water and Sewer Authority (RWSA) as it includes the replacement of their asbestos-cement water main along James River Road.

5/7/2024: RWSA staff successfully performed a field test of the high service pumps at the Scottsville Water Filter Plant, ensuring they could adequately fill the Stony Point Water Tank. This test was confirmation that the proposed construction sequencing of this project is feasible. ACSA staff continues easement acquisition efforts with the first group of property owners.

3. <u>Ragged Mountain Phase 1 Water Main Replacement (Account Code 1760)</u>:

Consultants:	Dewberry Engineers, Inc. (Dewberry) and Kimley-Horn and Associates (KHA)
Project Status:	Design
Percent Complete:	90%
Contractor:	Undetermined
Construction Start:	Undetermined
Completion:	Undetermined
Total Budget:	$1,218,400
Appropriated Funds:	$268,913

Project Description: This project will replace the oldest active water main remaining in our system serving residents along Fontaine Avenue Extended and Reservoir Road. This cast iron pipe is over 90 years old and is severely tuberculated, which significantly reduces the flow capacity in this section.

5/7/2024: RWSA has authorized KHA to proceed with the field survey efforts associated with the ACSA's proposed waterline that will parallel a portion of RWSA's Ragged Mountain to Observatory WTP 36" Raw Waterline.

4. <u>Northfields Water Main Replacement (Account Code 1764)</u>:

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Design

Percent Complete:	90%
Contractor:	Undetermined
Construction Start:	2026
Completion:	2027
Total Budget:	$8,530,000
Appropriated Funds:	$655,997

Project Description: This project continues our systematic program to replace the aging and undersized asbestos-cement water mains in our system. The existing water mains are approximately 55 years old and have reached the end of their useful life. As a former well system that was connected to public water, most of the mains are also undersized. During design of the Northfields Water Main Replacement Project, ACSA staff identified several sections of sanitary sewer that could be installed along the roadway in coordination with the water main replacement work. These efforts will provide sanitary sewer service to nearly 20 existing neighborhood properties currently served by private septic fields.

1/9/2024: Comments on the 90% Design Documents have been returned to Ramboll.

5. <u>Huntington Village Water Connection (Account Code 1770)</u>:

Consultant:	ACSA Engineering Department
Project Status:	Construction
Percent Complete:	0%
Contractor:	Rocktown Excavating (Rocktown)
Construction Start:	2024
Completion:	2024
Total Budget:	$60,700
Appropriated Funds:	$63,533

Project Description: The existing water main that serves as the only feed into Huntington Village off Old Ivy Road is at risk of failure due to an existing rock retaining wall that was constructed overtop of the water main. This project provides a second water connection into Huntington Village which is comprised of approximately 135 residential customers.

5/7/2024: Rocktown has provided their Certificate of Insurance and anticipates submitting the signed Contract the week of May 6, 2024.

6. <u>Briarwood Water Main Replacement (Account Code 1766)</u>:

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Design
Percent Complete:	90%
Contractor:	Undetermined
Construction Start:	2026
Completion:	2027
Total Budget:	$2,220,000
Appropriated Funds:	$277,726

Project Description: This project continues our systematic program to replace PVC water mains that have been in service since the early 1980's and have recently experienced several breaks causing water service disruptions.

5/7/2024: Ramboll is working to schedule the test pits and geotechnical borings. ACSA staff anticipates receiving the four draft easement plats within the next two weeks.

7. <u>Barracks West Water Main Replacement (Account Code 1796)</u>:

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	95%
Contractor:	Undetermined
Construction Start:	2024
Completion:	2025
Total Budget:	$3,402,000
Appropriated Funds:	$218,191

Project Description: This project will replace the undersized and aging cast iron and galvanized water mains that were installed in the late 1960's. These water mains are original to the Old Salem Apartments development, now called Barracks West. This project follows our Strategic Plan goal to replace aging and undersized water mains throughout our system and will provide for an opportunity to improve fire protection to these multi-family apartments.

5/7/2024: ACSA staff recently discovered there is a potential sale of this property, so we are working to coordinate the easement with the contract purchaser. This is likely to cause a delay to our construction schedule if we are unable to acquire this easement in a timely manner.

8. <u>Townwood Water Main Replacement (Account Code 1773)</u>:

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	60%
Contractor:	Undetermined
Construction Start:	2028
Completion:	2028
Total Budget:	$1,300,000
Appropriated Funds:	$179,062

Project Description: This project continues our systematic program to replace PVC water mains that have been in service since the early 1980's and have recently experienced several breaks causing water service disruptions.

4/9/2024: The test pits have been completed for this project and that information has been provided to Dewberry for inclusion into the 90% Design Documents.

9. Broadway Street Water Main Replacement (Account Code 1768):

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Design
Percent Complete:	90%
Contractor:	Undetermined
Construction Start:	2024
Completion:	2024
Total Budget:	$1,417,800
Appropriated Funds:	$140,840

Project Description: This project will replace the ductile iron water main that was installed in the early 1970's and has been found to be in deteriorating condition based on recent excavations. With the redevelopment of the Woolen Mills Factory and Albemarle County's increased attention on economic revitalization of this corridor, replacement of this water main is crucial in transforming this area.

5/7/2024: ACSA staff continues efforts to acquire the necessary easement to construct this water main replacement project.

10. Raintree and Fieldbrook Water Main Replacement (Account Code 1771):

Consultant:	Michael Baker International, Inc. (Baker)
Project Status:	Design
Percent Complete:	50%
Contractor:	Undetermined
Construction Start:	2027
Completion:	2028
Total Budget:	$6,432,300
Appropriated Funds:	$290,887

Project Description: This project continues our systematic program to replace the PVC water mains in the Raintree and Fieldbrook subdivisions that have been in service since the early 1980's. In addition to replacing these PVC mains, this project will also eliminate pipe saddles at the water service connections that have been failing due to corrosion.

2/6/2024: This project has been assigned to a new ACSA staff engineer and the 50% Design Documents are currently under review.

11. Lewis Hill – West Leigh Water Connection (Account Code 1754):

Consultant:	ACSA Engineering Department
Project Status:	Design
Percent Complete:	95%
Contractor:	Undetermined
Construction Start:	2024
Completion:	2024
Total Budget:	$80,900
Appropriated Funds:	$147,125

Project Description: An existing PVC water main that serves as a connection between West Leigh Subdivision and Lewis Hill Subdivision was found to be compromised due to the encroachment of a nearby stream. The water main has been taken out of service to avoid a catastrophic failure and the resulting large volume of lost water. This project re-establishes the connection from West Leigh by taking advantage of the recent water main replacement along Sheffield Road with an 8-inch diameter pipe.

5/7/2024: ACSA staff was recently notified by one of the property owners that they are unwilling to grant an easement to the ACSA for the waterline connection. Given the easement challenges, ACSA staff are re-evaluating whether this interconnect is necessary.

12. Exclusion Meters Replacement (Account Code 1759):

Consultant:	ACSA Engineering Department
Project Status:	Construction
Percent Complete:	54%
Contractor:	ACSA and Irrigation Contractors
Construction Start:	September 2019
Completion:	2025
Total Budget:	$742,500
Appropriated Funds:	$247,500

Project Description: In the mid 1990's with the development of Glenmore, many new customers installed irrigation systems for their properties and wanted to have their sewer bills reduced by the amount of water that was diverted to irrigate their properties. Private meters were installed behind their ACSA meter to record this volume and it was "excluded" from the calculation of their sewer charges and these became known as exclusion meters. On January 1, 2006, the ACSA Rules and Regulations were modified to no longer allow private exclusion meters and required all future irrigation meters be tapped separately off our water mains. This project is a multi-year replacement program by our in-house CIP Crew to install dedicated, ACSA owned irrigation meters that will eliminate all remaining exclusion meters in our system.

5/7/2024: ACSA staff are working closely with several irrigation contractors to upgrade private exclusion meters to be compatible with our AMI system with the ACSA covering these costs. There are currently 226 private irrigation exclusion meters remaining in our system.

Sewer System CIP Projects

13. Madison Park Pump Station Upgrade (Account Code 1735):

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction
Contractor:	Anderson Construction, Inc. (ACI)
Construction Start:	October 2022
Completion:	November 2024

Total Budget: $1,940,000
Appropriated Funds: $2,003,831

Project Description: This wastewater pump station was constructed in the early 1980's by private development and the original equipment is nearing the end of its useful life. Additionally, the building is undersized creating difficulty in performing routine maintenance and making it impossible to install the control panels necessary to include this pump station in our new SCADA System.

5/7/2024: ACI has installed the grinder manhole and the new emergency bypass pump connection, allowing the pump station to be demolished. The site is now on bypass pumping.

14. <u>Airport Trunk Sewer Upgrade (Account Code 1828)</u>:

Consultant: Michael Baker International, Inc. (Baker)
Project Status: Design
Percent Complete: 90%
Contractor: Undetermined
Construction Start: 2026
Completion: 2028
Total Budget: $6,183,800
Appropriated Funds: $378,459

Project Description: With the continued growth in the Hollymead Town Center area, the existing sewer collector serving the airport and the area west of Route 29 has insufficient capacity to handle full build-out. The existing sewer was originally sized to serve the light industrial zoning designated for that area at the

time of construction. The increased density specified in the County Comprehensive Plan for the same drainage basin will exceed the capacity of the existing sewer. A study of the drainage basin was completed in 2016 with the recommendation the sewer main be increased in size by replacing it in place.

11/7/2023: ACSA staff recently received an executed Deed of Easement for this project, bringing the total to 9 of 24 easements having been obtained.

15. <u>Bellair – Liberty Hills Sewer (Account Code 1829)</u>:

Consultant:	Michael Baker International, Inc. (Baker)
Project Status:	Design
Percent Complete:	50%
Contractor:	Undetermined
Construction Start:	2025
Completion:	2026
Total Budget:	$6,393,715
Appropriated Funds:	$380,295

Project Description: Over the past several years, there has been an uptick in residents of the Bellair Subdivision seeking to connect to public sanitary sewer service since most residents are currently served by private septic fields. To gauge community interest for such a project, ACSA staff mailed out a survey to the residents seeking feedback on their interest. Based on initial feedback received, many of the property owners are interested in connecting to public sewer if it was made available.

3/12/2024: Comments on the 50% Design Documents have been returned to Baker.

16. <u>Biscuit Run Sewer Replacement (Account Code 1830)</u>:

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	0%
Contractor:	Commonwealth Excavating, Inc. (CEI)
Construction Start:	April 2024
Completion:	October 2024
Total Budget:	$479,600
Appropriated Funds:	$756,419

Project Description: During a routine inspection, the ACSA's Maintenance Department discovered an existing gravity main and manhole along an intermittent stream that drains into Biscuit Run had been exposed due to runoff. This project will replace the sewer segment that crosses the stream with ductile iron pipe and will reinforce the stream bank where the sewer manhole is exposed.

4/9/2024: The Preconstruction Conference with CEI was held on March 22, 2024. CEI anticipates construction activities beginning in May 2024.

17. <u>FY 2024 Miscellaneous Sewer Rehabilitation (Account Code 1908)</u>:

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	Underway
Contractor:	Prism Contractors & Engineers, Inc. (Prism)
Construction Start:	June 2023
Completion:	June 2024
Total Budget:	$500,000
Appropriated Funds:	$500,000

Project Description: This project continues our annual "find and fix" program of sanitary sewer rehabilitation to reduce I&I in our system.

5/7/2024: Manhole rehabilitation efforts associated with Work Order No. 1 are complete.

<u>Non-Utility and Facility CIP Projects</u>

18. <u>Energy Audit (Account Code 1625)</u>:

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	40%
Contractor:	ACSA Facilities Group
Construction Start:	July 2023
Completion:	January 2024
Total Budget:	$390,000
Appropriated Funds:	$296,000

Project Description: This project consists of a comprehensive energy audit of the Operations Center and all pump stations. The Energy Audit evaluated current energy consumption and the factors that drove it, as well as analysis of our utility rate structures to identify potential cost savings. Surveys were conducted of all systems, including operation and maintenance procedures to determine where energy conservation could be improved. Recommendations from the Energy Audit included: LED Lighting Retrofit, Occupancy Based HVAC Controls, replacement of Domestic Water Heater, improved efficiencies of water and wastewater pumps, pursuit of Electric Fleet Vehicles (EV) and exploration of Solar Photovoltaic renewable energy.

4/9/2024: The Ford F-150 Lightning has been fully equipped and placed into service. ACSA staff is working to schedule the installation of the necessary conduits and transformer pad.

19. <u>Avon Operations Center (Account Code 1622)</u>:

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	100%
Contractor:	Undetermined
Construction Start:	2024
Completion:	2025
Total Budget:	$11,990,000
Appropriated Funds:	$933,857

Project Description: As part of the Operations Center Expansion Study our consultant reviewed all properties owned by the ACSA that could be utilized as we continue to grow. The Avon Street property has long been held as a future location to build additional facilities in a central location, as needed. The current Maintenance Yard at our Operations Center is becoming overcrowded with equipment and materials, causing us to locate some equipment and larger materials in the former ACSA Maintenance Yard at the Crozet Water Treatment Plant, which we lease from RWSA. The future expansion of granular activated carbon (GAC) at the Crozet Water Treatment Plant site will result in the loss of much of the ACSA's storage space at that site. This project will begin to develop the Avon Street property into a much larger vehicle and materials storage facility, including a training area for our equipment operators.

5/7/2024: Dewberry is coordinating with Schnabel Engineering on their schedule to perform the seismic refraction work on the site which will provide additional rock information to potential bidders. ACSA and Dewberry staff met on April 29, 2024, to discuss the rebidding process. We are tentatively scheduled to readvertise the project on June 2, 2024, with bid opening anticipated by the end of July 2024. ACSA staff are also in the process of purchasing the required Nonpoint Nutrient Offset Credits required to receive final approval from the County. A Board authorization is proposed for this project.

20. <u>ACSA – Fire Suppression System Replacement (Account Code 1631)</u>:

Contractor:	Fire-X Corporation (Fire-X)
Project Status:	Construction
Percent Complete:	75%
Construction Start:	March 2024
Completion:	July 2024
Total Budget:	$750,000
Appropriated Funds:	$870,815

Project Description: This project replaces the existing fire suppression system in both the Administration and Maintenance buildings here at our Operations Center. During a recent inspection, it was noted that the piping is beyond its useful life and a complete replacement was recommended. The ACSA anticipates utilizing a Design/Build Contract to perform this work.

5/7/2024: Fire-X has completed the installation of the replacement system in the lower level of the Administration Building and passed final County inspections. Ceiling restoration work will begin the week of May 6, 2024. Fire-X has begun demolition efforts in the Warehouse.

21. <u>Records Management Project (Account Code 1632)</u>:

Consultant:	Right Fit Consulting
Project Status:	Study
Percent Complete:	55%
Study Start:	September 2023
Completion:	May 2024
Total Budget:	$325,000

Appropriated Funds: $10,800

Project Description: The goal of this project is to improve record compliance and retention while digitizing paper files currently in storage. The initial phase of the Records Management Project consists of the classification of each document, so they are properly and securely stored and maintained. Ultimately files across the organization will be scanned and searchable digital files created, allowing physical space to be freed up.

4/9/2024: The Library of Virginia's general schedule for document retention and disposal has been reviewed and it has been determined which items apply to the ACSA. A Records Retention and Disposal policy has been drafted by ACSA legal counsel and is under review by ACSA staff.

22. <u>Four-Story Backflow Prevention Assembly Retrofit (Account Code 1765)</u>:

Consultant:	ACSA/Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	100%
Contractor:	Foothill Irrigation
Construction Start:	February 2023
Completion:	April 2024
Total Budget:	$348,000
Appropriated Funds:	$360,295

Project Description: In late 2018 ACSA staff became aware of four-story residential structures being constructed without proper backflow prevention assemblies. Section 8 of the ACSA Rules and Regulations details the ACSA Backflow Prevention Program. This program is in accordance with 12VAC5-590-570 through 12VAC5-590-630 of the Virginia Waterworks Regulations. The Containment Policy in 12VAC5-590-610 outlines the requirement for a backflow prevention (BFP) assembly on the domestic water service line to high rise structures, defined as four (4) or more stories.

5/7/2024: The final backflow assembly installation was completed on April 23, 2024. This project is complete and will be removed from the CIP Monthly Report.

23. <u>SCADA System Phase 3 (Account Code 1605)</u>:

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction
Percent Complete:	95%
Contractor:	M.C. Dean
Construction Start:	November 2022
Completion:	June 2024
Total Budget:	$943,115
Appropriated Funds:	$1,224,918

Project Description: The ACSA Utility System has over 40 critical assets that include water and wastewater pump stations, water storage tanks and master PRV

stations. They are considered critical because malfunctions or failures at any of the assets could have a drastic effect on our utility system and our customers. These assets are currently monitored by site visits of assigned Maintenance personnel. Phase 3 will expand the existing Supervisory Control and Data Acquisition (SCADA) System to serve the final seven master PRV stations and one water booster station that will allow ACSA employees to remotely monitor the operations of these critical assets from the main office building. Using alarms, we will be able to evaluate problems and prevent some failures before they happen more quickly.

5/7/2024: Change Order No. 5 has been executed that includes the replacement of the Northfield Water Pump Station Master Level Control infrastructure. It was determined that replacement of these controls was necessary for integration with the new SCADA system. The necessary materials have been ordered and M.C. Dean anticipates wrapping this work up in June 2024.

JML/jl
060806CIPMonthly05162024

Albemarle County Service Authority (ACSA)
Active Private Development Projects
May 2024

1. 1745 Avon Street Extended Sanitary Sewer Extension (Scottsville): Sewer main extension to serve Dominion Crane & Rigging, Inc., located along Avon Street Extended, south of Mill Creek Drive and adjacent to the Avon Operations Center site.

2. **Belvedere Phase 3 Block 10 (Rio): Water and sewer main extensions to serve 74 single family homes at the end of Farrow Drive in the back of Belvedere.**

3. Berkmar Self-Storage/Hotel (Rio): Water main extension and sewer laterals to serve 92-room hotel and commercial self-storage, located along Berkmar Drive across from Berkmar Overlook and next to Better Living.

4. Brookhill Blocks 16 & 17 (Rivanna): Water and sewer main extensions to serve 135 single family homes in the Brookhill subdivision, located north of Polo Grounds Road and east of the Montgomery Ridge Subdivision.

5. **C'Ville Rio Road Apartments (Rio): Water and sewer main extensions to serve 250 apartment units. The site is located along Rio Road West, north of Charlottesville Health and Rehab.**

6. Dunlora Park Phase 2 (Rio): Water and sewer main extensions to serve 6 single family homes in Dunlora Park, located at the intersection of Rio Road East and Dunlora Drive.

7. Lochlyn Hill – Phase 4 (Rio): Water and sewer main extensions, and demolition of 14 existing homes for 14 single family detached units and 8 single family attached units. This project is located along Pen Park Lane, north of the City limits.

8. Mountain View Elementary Building Addition (Scottsville): Water main extension to facilitate building addition.

9. North Pointe - Section 2 (Rivanna): Water and sewer main extensions to serve 162 single family homes. The project is located at the northern end of Cliffstone Boulevard.

10. Rivanna Village Phase 2 (Scottsville): Water and sewer main extensions to serve 178 residential units. This project is located east of the Glenmore Ground Storage Tank and Rivanna Village Phase 1.

11. Southwood Village – Blocks 11 & 12 (Scottsville): Water main extension and sewer laterals to serve 194 multi-family units. This project is located at the intersection of Old Lynchburg Road and Hickory Street.

12. Southwood Redevelopment Village 3 (Scottsville): Water and sewer main extensions to serve 127 single family units and 10 condominium units. This project is located along the eastern side of Horizon Road, south of Hickory Street.

13. Stonefield Block D1 (Jack Jouett): Water main extension to serve a 220-unit apartment building at the intersection of Inglewood Drive and Bond Street.

14. UVA Fontaine Research Park – Manning Institute of Biotechnology (Samuel Miller): Water main relocation to serve the approx. 350,000 square foot Manning Institute of Biotechnology. The site is in the existing parking lot, northeast of 450 Ray C Hunt Drive.

15. Victorian Heights (Rio): Water and sewer main extensions to serve 34 attached single family and 54 multi-family units. The site is located to the south of RWSA's Woodburn Road Water Tank, between Woodburn Road and Berkmar Drive.

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2024 CIP Authorizations **STAFF CONTACT(S)/PREPARER:** Jeremy M. Lynn, P.E., Director of Engineering	**AGENDA DATE:** May 16, 2024 **ACTION:** ☐ **INFORMATION:** ☐ **CONSENT AGENDA:** **ACTION:** ■ **INFORMATION:** ☐ **ATTACHMENTS:** YES

BACKGROUND: Authorization for one CIP Project, which is included in the CIP Rate Model Budget. This authorization is for additional re-bidding services and the purchase of phosphorus credits for the Avon Operations Center Project.

DISCUSSION:

- Provides ACSA staff with professional expertise of our term contract consultant during the re-bidding of the Avon Operations Center Project.
- Recognize and utilize the benefits of a nutrient bank managed by ecological professionals in protecting the environment relative to the development of the Avon Operations Center. The purchasing of credits from a nutrient bank was previously utilized for the parking lot expansion at the Administration Building.

BUDGET IMPACT: The costs for this authorization are within the amount budgeted in the CIP Rate Model.

RECOMMENDATIONS: Authorize funding for these projects to keep our CIP Project Schedule moving forward and improving our utility system.

BOARD ACTION REQUESTED: Approve the Consent Agenda.

ATTACHMENTS:

- Detailed memo of the proposed CIP authorizations.
- Proposal dated May 6, 2024, prepared by Dewberry Engineers for Additional Re-Bid Services for the Avon Operations Center Project.
- Ostrya Conservation Letters of Availability dated March 20, 2024.

Albemarle County Service Authority
Serving Conserving

MEMORANDUM

To: Board of Directors
From: Jeremy M. Lynn, P.E., Director of Engineering
Date: May 16, 2024
Re: FY 2024 CIP Authorizations
cc: Michael E. Derdeyn

The following project requires Board authorization:

A. **Avon Operations Center Project:** In response to an initial unsuccessful bidding, our consultant, Dewberry Engineers (Dewberry), developed a Scope of Services for re-bidding services for the Avon Operations Center Project. Attached is a letter dated May 6, 2024, from Dewberry with their fee proposal for providing these services. The ACSA staff has reviewed this proposed fee and finds it satisfactory. The estimated cost for Additional Re-Bid Services is $36,530.

During the design phase of this project, the option to purchase approx. six (6) lbs. of phosphorus credits was identified as the optimal approach to meeting stormwater requirements for the Avon Operations Center. ACSA staff have contacted multiple Nutrient Banks and have agreed to purchase the necessary credits from the Slate River Nutrient Bank in Buckingham County (within the James River watershed) at a price of $9,990 per lb. The cost to purchase the required credits is not expected to exceed $61,000.

Board Action
We request the Board of Directors appropriate $97,530 from the FY 2024 3R Fund for Additional Re-Bid Services and the purchase of phosphorus nutrient credits for the Avon Operations Center Project.

JML/jml
Attachments
010101CIPAuthorizations05162024

Dewberry

Dewberry Engineers Inc.
4805 Lake Brook Drive, Suite 200
Glen Allen, VA 23060

804.290.7957
804.290.7928 fax
www.dewberry.com

May 6, 2024

Mr. Alexander J. Morrison, P.E. **VIA E-MAIL**
Senior Civil Engineer
Albemarle County Service Authority
168 Spotnap Road
Charlottesville, Virginia 22911

RE: Avon Operations Center
Professional Engineering Services – Additional Re-Bid Services
Scope of Services and Task Spreadsheet

Dear Mr. Morrison:

Enclosed please find Dewberry Engineers Inc.'s (Dewberry's) Scope of Services and Task Spreadsheet for additional design and bidding phase services for the above referenced project. This letter and enclosed document have been prepared in response to ACSA request for a proposal for the following services:

Re-Bidding Services

1. Discuss potential scopes that can be separately itemized on bid form (ex. solar panels, EV chargers, epoxy flooring, etc.). Provide estimated costs and impact to project if items are removed from scope.
2. (with subconsultant Schnabel Engineering): perform geophysical investigation via seismic refraction to obtain additional data about presence of subsurface rock on site.
   a. Schnabel will lay four traverses generally around the proposed building area, approximately 1,600 LF.
   b. Data will be analyzed along with the previous traditional Geotech report (soil borings and lab analysis).
   c. Report will be prepared to summarize presence and potential characteristic of subsurface rock on project site.
   d. Refer to enclosed scope provided by Schnabel.
3. Analyze results of additional geophysical investigation (pending from Schnabel) to better understand potential impact of rock on site. Revise Earth Moving specification, and revise Bid Form to separately include quantity and unit prices for rock excavation.
4. Incorporate, via either plan change or specification clarification, previous bidder questions into project documents, to simplify the re-issue of construction docs and minimize duplicate bidder questions.
5. Electrical: Provide narratives/revisions for PV array & EV Chargers for itemizing.
6. Assist ACSA with distribution of bid documents, advertisement for bidding, establishment of bid and award dates.
7. Attend one (1) virtual or in-person pre-bid meeting.
8. Provide clarifications to technical questions and RFIs.
9. Prepare contract document addenda as required. Assume two (2) addenda.
10. Provide 5 sets of final construction documents to ACSA. Additional sets will be provided on a per set cost basis to be included on the fee estimate.

11. Evaluate the bids and make recommendations to ACSA.

For completion of the scope of services outlined above, Dewberry will be paid on a fee schedule as follows:

- **Geophysical scope (Schnabel):** Lump Sum fee of $21,300
- **Bid Phase Services:** Hourly, Not to Exceed fee of $15,230
- **Total Estimated Fee: $36,530**

Assumptions/Exclusions:

1. Engineering design services other than those noted above are excluded from this proposal.

We are available to meet and discuss the information provided for this portion of services for the project at your earliest convenience, if necessary. We appreciate the opportunity to continue to work for the Albemarle County Service Authority on this project.

Sincerely,

Dewberry Engineers Inc.

Heather A. Campbell, PE
Contract Manager

Kevin A. Pennock, P.E.
Senior Associate

Enclosures:
Schnabel Proposal for Geophysical Services

Schnabel ENGINEERING
T 434.975.3200
480 Four Seasons Drive / Charlottesville, VA 22901 schnabel-eng.com

April 12, 2024

Mr. Kevin Pennock
Dewberry Engineers, Inc.
4805 Lake Brook Drive, Suite 200
Glen Allen, VA 23060

Subject: **Proposal for Geophysical Services, 1737 Avon Street Extended, Albemarle County, Virginia (Schnabel Reference 23430009)**

Dear Mr. Pennock:

SCHNABEL ENGINEERING, LLC (Schnabel), is pleased to submit our proposal to provide geophysical services for this project. We prepared this proposal in response to your request on April 9, 2024.

PROJECT DESCRIPTION

The site is located in Albemarle County, Virginia about 1 mile south of the City of Charlottesville. The proposed project site is south of Mill Creek Drive, east of Avon Street Extended, and west of Founders Place. An existing Rivanna Water and Sewer Authority water tank and an existing cell tower are located just west of the proposed development. Based on our review of the proposed site plan, the elevation of the site varies from about EL 600 ft on the southwest corner to about EL 510 ft on the northeast portion of the site. The site is primarily wooded.

The project consists of a new facility with buildings, retaining walls, and pavements. The proposed improvements consist of a 2-story vehicle maintenance building, vehicle storage area, fuel station, vehicle rinse area, and training area for equipment operators. The vehicle maintenance building will be two stories and will have an approximately 7,800 sf footprint. The building framing will consist of reinforced concrete, masonry, and structural steel. The building will have a walk-out basement and it is anticipated that it will be supported on shallow spread footings. The basement FFE will be about 555 ft and the upper level FFE will be about 575 ft.

Approximately 1500 ft of roadway will be installed connecting Avon Street Extended to Founders Place. New parking lots and a stormwater management basin will be constructed, and new utilities will be installed throughout the site. Cast-in-place concrete and segmental retaining walls will be constructed to accommodate the sloped site. Up to approximately 27 ft of cut will be required to grade the basement level for the new maintenance building. Additional cuts on the western portion of the site vary up to 22 ft south of the proposed building. Up to 5 ft of cut is expected for the stormwater management basin. The majority of the eastern portion of the site will require up to approximately 15 ft of fill.

We obtained the project information from the 90% Grading and Drainage Plan by Dewberry, dated February 10, 2023.

We prepared a Geotechnical Engineering Study for this project dated February 7, 2020 (SE Project 19C43026). Our borings encountered rock about 15 ft above the FFE of the basement, and about 14 ft above the proposed pavement on the south border of the project just south of the proposed building. We understand the project team wants additional information for evaluating the amount of rock excavation that could be expected.

OBJECTIVE AND SCOPE OF SERVICES

Our objective is to evaluate the subsurface conditions at the site to provide additional information for the project by using geophysical methods. Seismic refraction directly measures seismic compressional wave (P-wave) velocities which can be correlated to variations in hardness in the subsurface and are typically used to define depth to bedrock and to evaluate the rippability of the bedrock.

Geophysical Investigation

- We plan to collect seismic refraction data for 2 days on site. We anticipate in this time we can collect up to 4 separate traverses for a total length of approximately 1,600 linear ft of data coverage. The lengths and number of traverses will be adjusted to balance resolution, depth of investigation, and productivity based on site conditions. Please see Attachment 1 for proposed traverse locations.
- We will clear paths in the brush with hand tools in order for us to access the ground surface along straight lines.
- We will use a sledgehammer to strike a plate to create the seismic source. We anticipate some vibration noise from traffic while working near Avon Steet Extended and the United Rentals parking lot. If necessary, we will increase the number of stacks of sources and/or provide increased coupling with the ground to overcome the noise.
- Data will be reviewed on site for quality and processed in our office.
- Seismic data processing and analysis will be conducted following the field survey. We will present seismic data in subsurface profile format with color enhanced contours of the velocity model with interpretations of our findings, boring correlation, or other subsurface data available.

Geophysical Data Report

- The results and interpretations of the seismic refraction survey will be provided in a geophysical data report. This report will include the geophysical survey results, correlation with test borings from Schnabel's Geotechnical Study, a summary of methods used, scaled and annotated profiles, and a location plan.
- Additionally, the report will include the rippability characteristics of the subsurface materials encountered based on comparisons between the resulting geophysical data and published bedrock rippability studies.

ASSUMPTIONS

We have considered rights of entry and access to the site will be provided by others. Permission required to perform the work will be provided by others at no cost to us.

We assume no limitations on work. We plan to work within daylight hours on weekdays, generally within 7 am to 7 pm.

Progress of on-site work may be dependent upon weather and ground conditions, or other factors beyond our control. Refraction data cannot be collected during rain and heavy wind. Direct access to the ground surface within the area of interest is necessary for the proposed geophysical investigation. Obstructions such as thick vegetation, debris, and structures will prevent data collection at those locations.

It should be noted that the effectiveness of geophysical methods in subsurface explorations is dependent on many environmental factors such as stray electrical currents, cultural features, traffic noise, soil saturation conditions, and known or unknown buried utilities. Results from these methods may vary depending on actual site conditions.

We will locate geophysical traverses in the field using a sub-meter accuracy GPS unit. Ground surface elevations at the traverse locations will be estimated from the topographic data provided by your office.

CLIENT-PROVIDED DATA AND SCHEDULING

The client will provide electronic versions of topographic site plans indicating existing conditions and the proposed construction.

EXCLUSIONS

This agreement only includes the scope of services specifically identified above. Our proposed scope of services does not include surveying for line and grade, cost estimates, floor flatness and floor levelness testing, observation and testing of fireproofing, and observation and testing related to stormwater management structures other than placement and compaction of storm sewer backfill. We will gladly submit proposals for these services at your request.

LUMP SUM FEE

Our total lump sum fee for the proposed services is **$18,500**. Please note that if geophysical services are required less than four weeks from the date of this proposal (April 12, 2024), an additional $2,800 fee for rental equipment and a total fee of $21,300 will be charged.

GENERAL

The Terms and Conditions of our Master Services Agreement with Dewberry effective August 1, 2016, will apply to this proposed agreement. We understand you will issue a PO to authorize these services. This proposal is valid for 90 days from the date shown.

We appreciate the opportunity to submit our proposal for these services and are looking forward to a cordial working relationship for this engagement. Please contact our office if you have any questions with regard to this proposal.

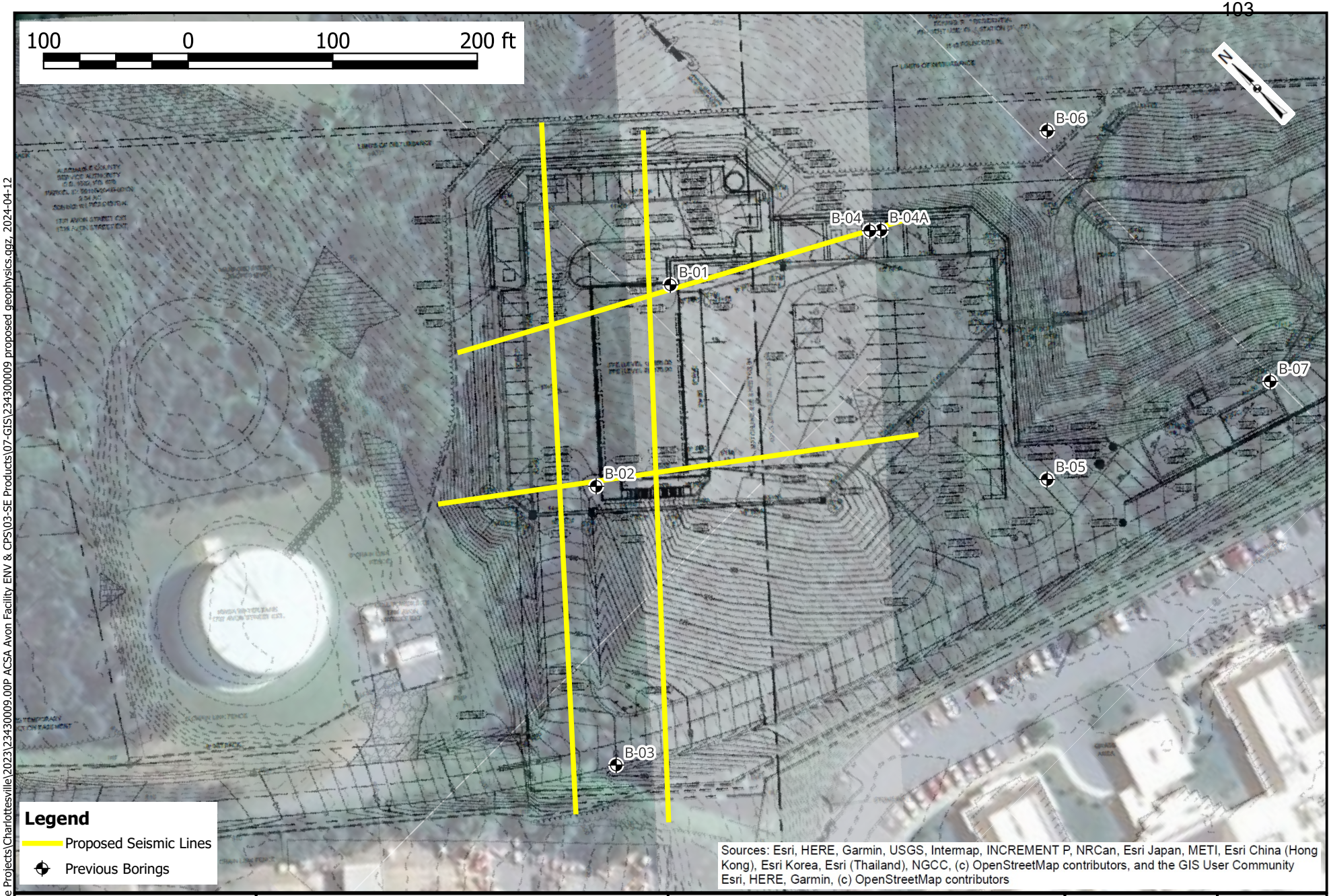
Sincerely,

SCHNABEL ENGINEERING, LLC

Noland M. Silman, PE
Associate

NMS:DMC

Attachment 1: Proposed Seismic Traverses Location Plan



\\EgnyteDrive\Egnyte Projects\Charlottesville\2023\23430009.00P ACSA Avon Facility ENV & CPS\03-SE Products\07-GIS\23430009 proposed geophysics.qgz, 2024-04-12

Schnabel ENGINEERING

ACSA AVON FACILITY
1737 AVON STREET EXTENDED
ALBEMARLE COUNTY, VIRGINIA

Attachment Name: PROPOSED SEISMIC TRAVERSES	Done: E. WORTHINGTON	Attachment Number: 1
Project Number: 23430009.00P	Reviewed: D. CARPENTER	Date: APR 2024

Ostrya Conservation

March 20, 2024

John E. Anderson, P.E.
Senior Civil Engineer
Albemarle County Service Authority
168 Spotnap Road
Charlottesville, Virginia 22911

Re: Slate River Nutrient Bank Nutrient Offset Availability

Project Name: ACSA Avon Operations Center

John Anderson,

This letter is to confirm the availability of authorized nonpoint nutrient offsets at the Slate River Nutrient Bank located in Buckingham County. The Slate River Nutrient Bank has received operational status through the Chesapeake Bay Watershed Nutrient Exchange Program (Virginia Code § 62.1-44.19:12 et seq.) of the Virginia Department of Environmental Quality. DEQ approved this project and issued a Nonpoint Nutrient Credit Generation Certification: Certificate No. James-045 and an initial credit release for this project on January 14, 2019. A further credit release was released one year later, on January 2, 2020, upon meeting the success criteria as laid out by DEQ.

As of the date of this letter, Ostrya Conservation, Inc. has 33.58 pounds of phosphorus offsets and 112.37 pounds of nitrogen offsets available for transfer in the approved service area in the James River watershed (including the following HUCs: 02080201/Upper James; 02080202/Maury; 02080203/Middle James-Buffalo; 02080204/Rivanna; 02080205/Middle James-Willis; and 02080207/Appomattox). These offsets were certified pursuant to the Chesapeake Bay Watershed Nutrient Exchange Program by the Virginia Department of Environmental Quality and the Virginia Department of Conservation and Recreation to be used as compensation for state or local permit water quality requirements. These offsets have been generated and are transferable according to § 10.1- 603.8:1 of the Code of Virginia.

Ostrya Conservation confirms, via this letter, that the Slate River Nutrient Bank is reserving 6.02 phosphorus credits (i.e., 6.02 pounds/year) for use on the aforementioned project. Reservation of these credits is contingent on putting an "Agreement for Purchase and Sale of Nonpoint Nutrient Offset Credits" in place with Ostrya Conservation, Inc. within two months of the date of this letter.

Please contact me with any questions.

Sincerely,

James M. Eaton | Director
Phone: +1-708-703-2552
Email: james.eaton@ostryaconservation.com

Ostrya Conservation

Ostrya Conservation Inc.
P.O. Box 153
Scottsville VA 24590

March 20, 2024

John E. Anderson, P.E.
Albemarle County Service Authority
168 Spotnap Road
Charlottesville, Virginia 22911

Re: Slate River Nutrient Bank Nutrient Offset Availability

Project Name: ACSA Avon Operations Center

John Anderson,

Ostrya Conservation Inc. was established in 2017 with the vision of supporting environmental conservation efforts throughout the Commonwealth of Virginia by creating additional value for natural ecosystems and managed lands. The Slate River Nutrient Bank within the James River Basin was established for this purpose. Over its lifetime, the Slate River Nutrient Bank will reduce over 339 pounds of nitrogen and 101 pounds of phosphorus from entering local waterways and the Chesapeake Bay. In response to your RFP, Ostrya Conservation Inc. would be interested in providing up to 6.02 pounds of phosphorus in order to offset your water quality impacts in HUC 02080204.

Please accept this letter as my formal bid for your RFP. Bid details include the following:

1) The Slate River Nutrient Bank has over 6.02 lbs of phosphorus available and has been authorized to sell/transfer phosphorus credits in HUC 02080204 by DEQ;
2) If selected, Ostrya Conservation Inc. will reserve up to 6.02 phosphorus credits at the quoted price through May 20, 2024;
3) Ostrya Conservation Inc. contract price is $60,139.80 for 6.02 lbs of phosphorus credits; and
4) The above contract price equates to a per phosphorus credit price of $9,990.00.

Thank you for the opportunity to provide you with a bid for phosphorus credits for use in HUC 02080204 of the James River watershed. I look forward to working with you on this opportunity.

Sincerely,

James M. Eaton | Director | Ostrya Conservation
Phone: +1-708-703-2552 | Email: james.eaton@ostryaconservation.com
|www.ostryaconservation.com

ALBEMARLE COUNTY SERVICE AUTHORITY

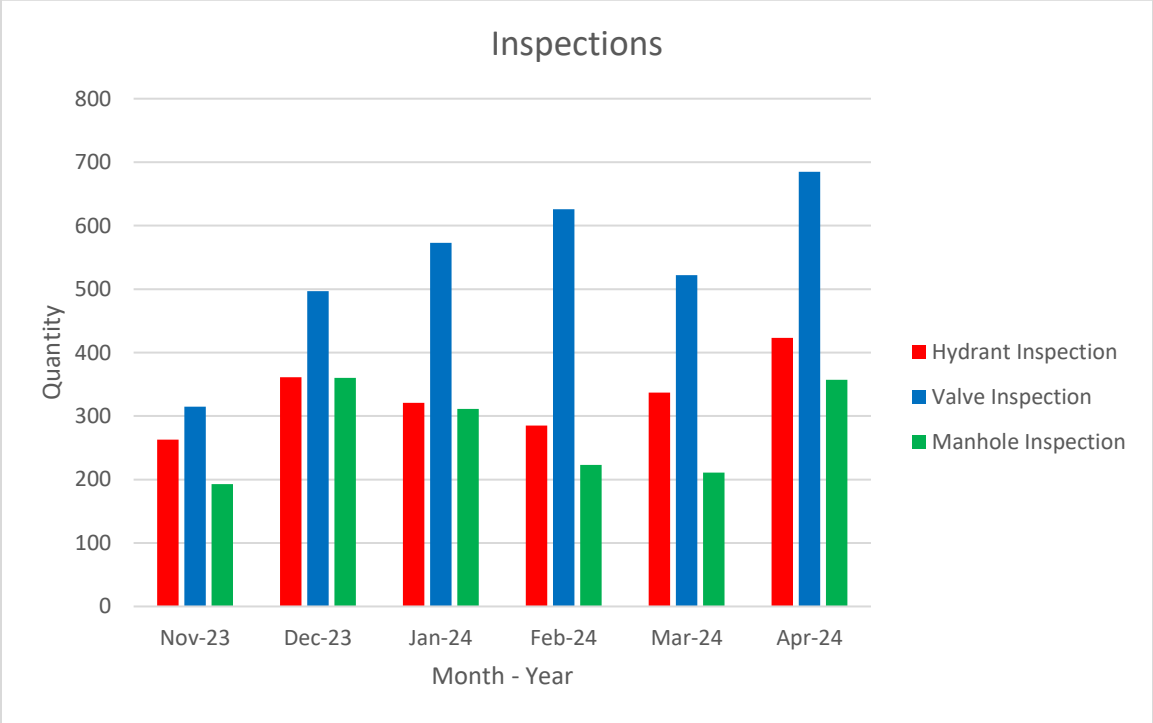
AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2024 Monthly Maintenance Update Report **STAFF CONTACT(S)/PREPARER:** Alexander J. Morrison, P.E., Director of Operations	**AGENDA DATE:** May 16, 2024 **CONSENT AGENDA:** **ACTION:** ■ **INFORMATION:** ■ **ATTACHMENTS:** NO

BACKGROUND:

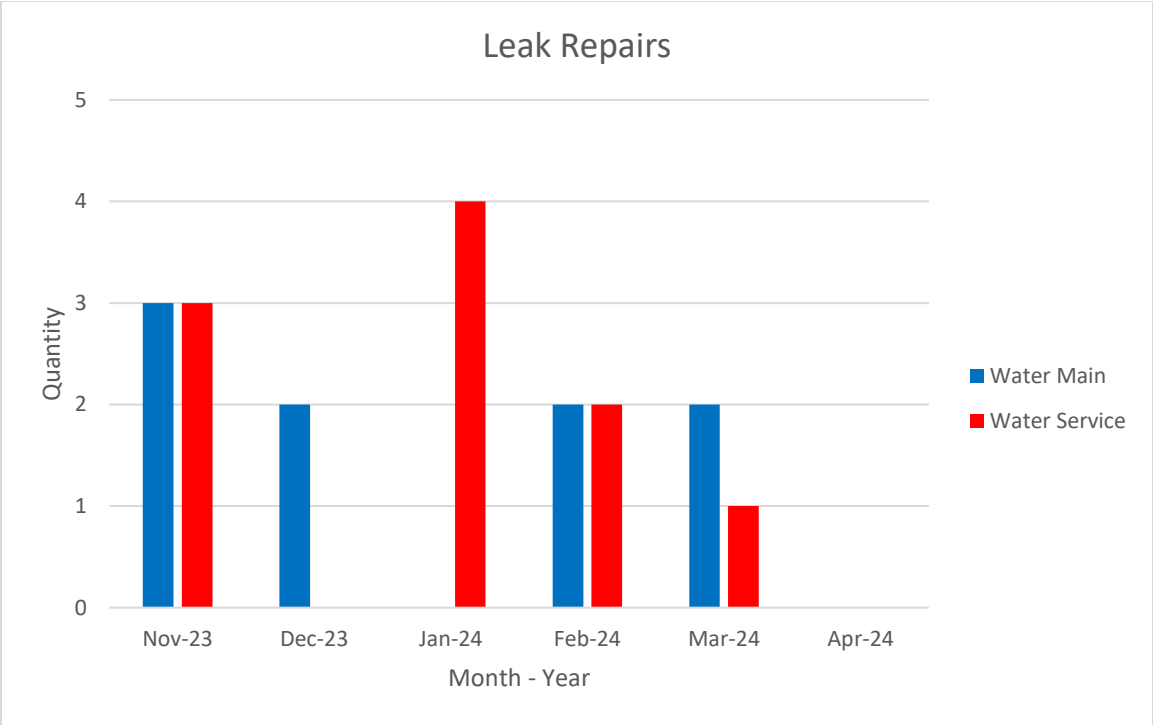
Current total years of service in the Maintenance Department: 317.7 years
Current average years of service in the Maintenance Department: 9.9 years
Current number of employees in the Maintenance Department: 32

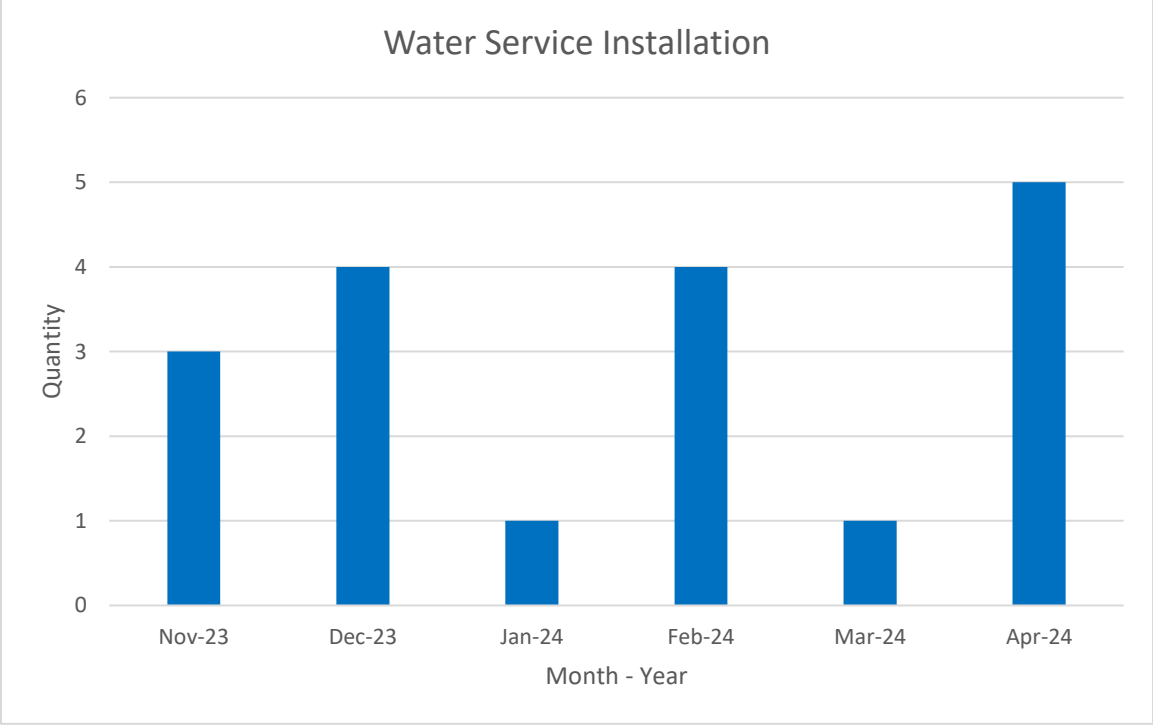
Below are 5 graphs depicting various routine monthly Maintenance Department activities for the previous 6-month period, based on completed Cityworks work orders and inspections.



ALBEMARLE COUNTY SERVICE AUTHORITY

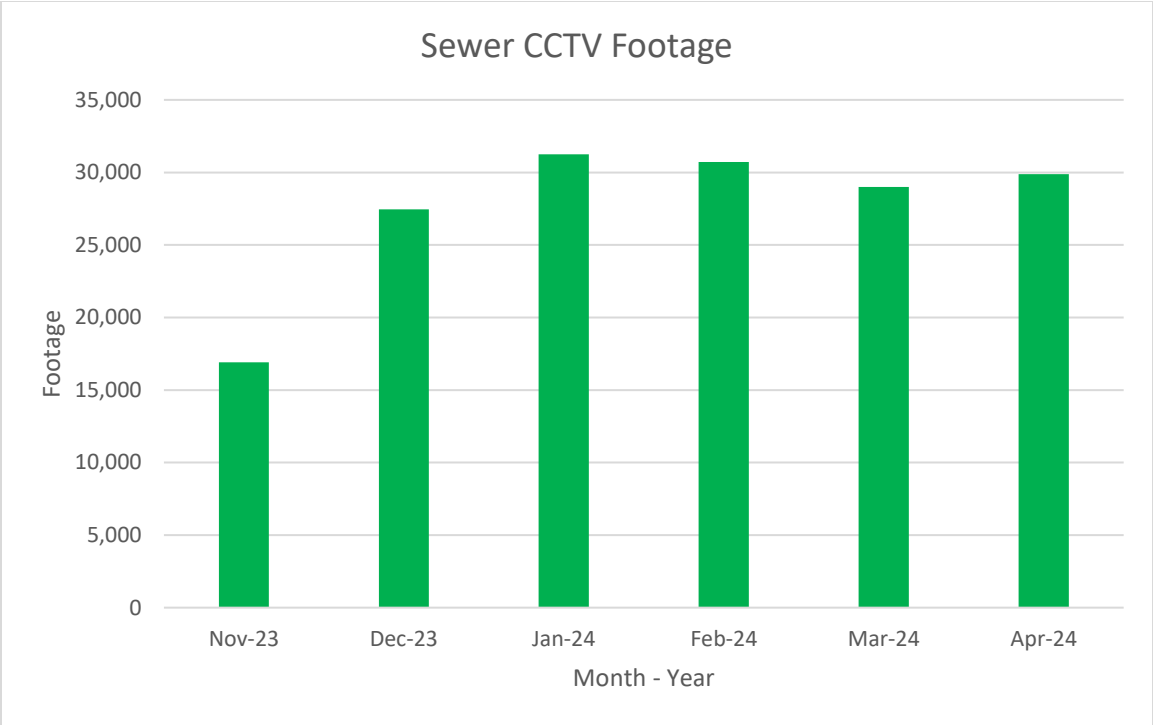
AGENDA ITEM EXECUTIVE SUMMARY

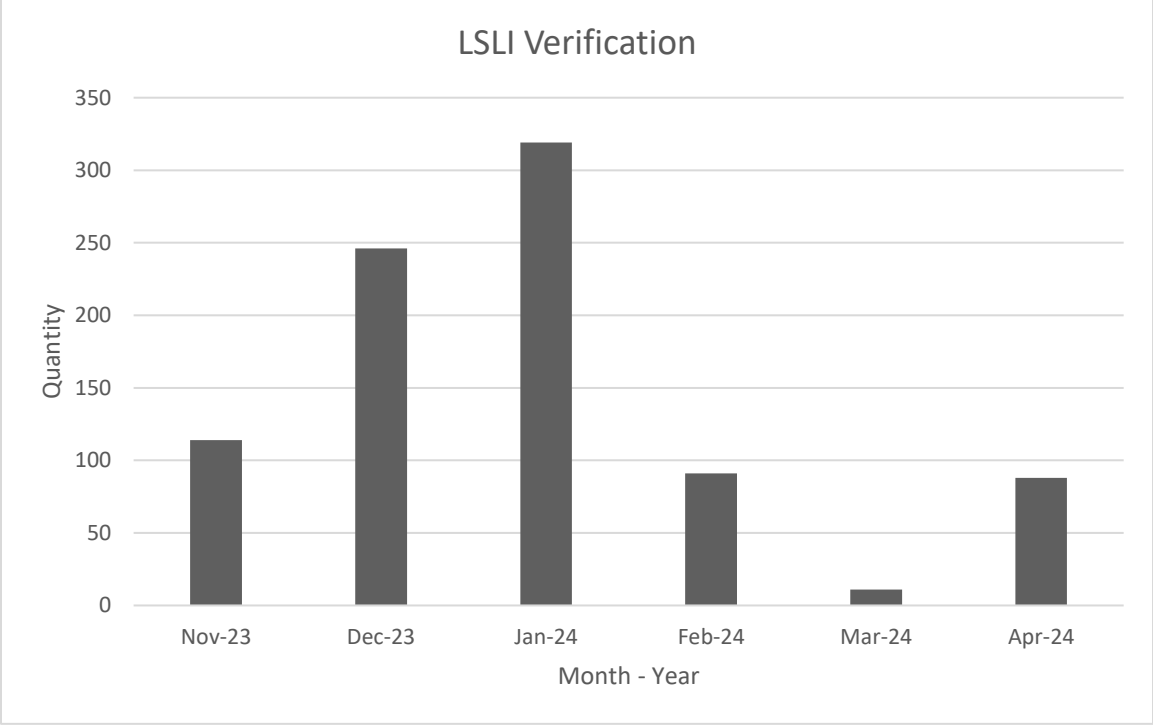




ALBEMARLE COUNTY SERVICE AUTHORITY

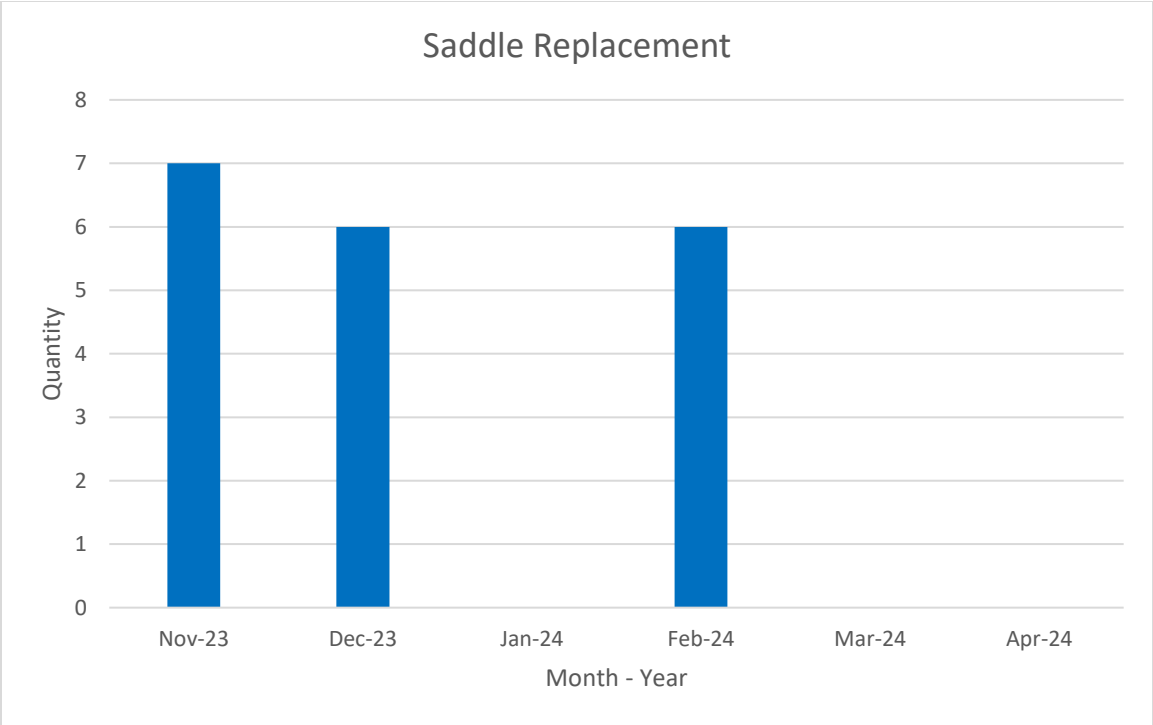
AGENDA ITEM EXECUTIVE SUMMARY





ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY



DISCUSSION:

- Routine Monthly Maintenance Activities
    - Inspections: Monthly inspections have increased slightly in April due to field availability for staff with favorable weather conditions.
    - Leak Repairs: The ACSA had no water main or water service leaks during the month of April.
    - Water Service Installation: New water service installations increased in April as the start of the irrigation season gets underway.
    - Sewer CCTV Footage: The monthly footage of sanitary sewer undergoing CCTV inspection stayed constant into April due to favorable weather conditions.
    - Lead Service Line Inventory (LSLI) Verifications: During the month of April, 88 LSLI verifications were completed. We are approaching the completion of data collection in the Lead and Copper Rule

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

Revisions (LCRR) developed by the Environmental Protection Agency (EPA), with a mandated deadline of October 16, 2024. Attachment 2 shows ACSA crews conducting an LSLI verification.

- Saddle Replacements: During the month of April, the saddle replacement crew conducted seven (7) test digs as preparatory work for future saddle replacements. These locations were identified by the Virginia Department of Transportation (VDOT) for the 2025 calendar year repaving schedule. The test digs will allow the ACSA to determine if saddle replacements or water main replacements should be scheduled in these locations ahead of the repaving activities.

- Miscellaneous Maintenance Activities

  - New Water Service Installations: As seen in the first Attachment, ACSA crews are excavating a water main in the Bellair Subdivision as they prepare to install a new domestic water service.
  - ACSA's Truck Mounted Attenuator (TMA) Vehicle: The ACSA owns a TMA vehicle to be used, as required by VDOT's Work Zone Safety Manual, during certain work activities in the VDOT right-of-way (ROW). The TMA is designed to protect workers in the ROW from impacts by vehicles or other equipment. As seen in the third Attachment, the ACSA crews utilized the TMA on 5th Street Station Parkway during non-peak traffic hours to facilitate safe valve inspections along a 12" water main.

BUDGET IMPACT: None.

RECOMMENDATIONS: None.

BOARD ACTION REQUESTED: Approval of the Consent Agenda.

ATTACHMENTS:

- Picture: New Water Service Installation – Bellair Subdivision
- Picture: Lead Service Line Inventory Inspection
- Picture: ACSA's TMA Vehicle

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

New Water Service Installation – Bellair Subdivision

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

Lead Service Line Inventory Inspection

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

ACSA’s TMA Vehicle

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Rivanna Water & Sewer Authority (RWSA) Monthly Update **STAFF CONTACT(S)/PREPARER:** Gary O'Connell, Executive Director 	**AGENDA DATE:** May 16, 2024 **CONSENT AGENDA:** Informational **ATTACHMENTS:** Yes

BACKGROUND: This report continues the monthly updates on the Rivanna Water & Sewer Authority (RWSA) projects and Board meetings. Below are some updates on RWSA major projects and issues, including updates from the April 23rd RWSA Board Meeting and other communications:

- **Reflections on the past three decades at RWSA** – Upon reflection of major projects and agreements at RWSA, below is a summary of major events in their efforts at investments in safe, clean, reliable water. A lot of very positive things have happened and more to come in the future improvements planned.

    - The Ragged Mountain Dam Project and Cost Allocation Agreements of 2012; a plan to increase the community's drinking water supply by constructing a larger dam at the Ragged Mountain Reservoir and a connecting raw water pipeline from the South Rivanna Reservoir; an additional 12-foot raise of the reservoir will be completed by 2026.
    - 2014 Wastewater Projects Cost Allocation Upgrades Agreements – a plan to address wet weather flows and future capacity needs of the Urban Wastewater System; long-term cost allocation agreements.
    - The Observatory Water Treatment Plant, Raw Water Pumping and Piping Upgrade Cost and Capacity Allocation Agreement of 2020 - a plan to upgrade and expand the water production capacity of the Observatory Water Treatment Plant from 7.7 to 10 mgd, as well as replace and upgrade the raw water pump stations and pipelines between the Ragged Mountain Reservoir and the Observatory Water Treatment Plant.
    - The Northern Area Drinking Water Projects Agreement of 2022 – a plan for the allocation of costs for construction of four new drinking water infrastructure projects, all planned within the northern area of the County described as follows:

        1. The Airport Road Water Pump Station and Piping Project;
        2. The South Rivanna River Crossing Project;
        3. The North Rivanna River Crossing Project;
        4. The Water Storage Tank Project for the Airport Road Water Pump Station, along with all future capacity and non-capacity water facilities located north of the South Fork Rivanna River.

    - Major upgrade of Moores Creek AWRRF for nutrient reduction and wet weather capacity.
    - Major renovations of the South Rivanna and Observatory Water Treatment Plants.
    - Construction of the "Central Water Line", a major drinking water pipeline to serve the Urban Area; bid this summer.
    - One-third of the reservoirs pipeline complete, plan 2025-2030.

AGENDA ITEM EXECUTIVE SUMMARY

Major RWSA Projects Status:

- South Fork Rivanna River Crossing – Approximately 2,860 LF of 24" finished water line, including over 1,200 LF of HDPE piping to be installed via horizontal directional drilling under the South Fork Rivanna River. Anticipated advertisement for construction bids: July – August 2024.
- Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line and Pump Station – Approximately 4 miles of 36" ductile iron raw water line, including two major roadway crossings, and a new raw water pump station (initially 10 MGD, expansion to 26 MGD included in South Fork Rivanna to Ragged Mountain Reservoir Project listed below). Anticipated advertisement for construction bids: August – October 2024.
- Central Water Line – Approximately 5 miles of 24 & 30" ductile iron finished water line with 2 railroad crossings from the Observatory WTP to the Long Street Bridget at Pantops. Anticipated advertisement for construction bids: September – December 2024.
- Intake Tower and Perimeter Clearing, Ragged Mountain Reservoir - This contract will support the addition of 700 million gallons in reservoir water storage capacity by modifying the water control tower and completing vegetative clearing around the reservoir. Anticipated advertisement for construction bids: May – July 2025.
- South Fork Rivanna Reservoir to Ragged Mountain Reservoir Pipe, Intake, and Facilities – Approximately 6.5 miles of 36" ductile iron raw water line, including a railroad crossing, and a new 30 MGD raw water intake and pump station at the South Fork Rivanna Reservoir. Anticipated advertisement for construction bids: September – December 2025.

Rivanna Pump Station Restoration

Bypass Pumping - The 55 mgd bypass pumping system continues to operate off normal utility power. RWSA staff continue to closely monitor and address minor operational issues as they arise.

Insurance - RWSA Insurance carrier, VRSA, and its representatives have reviewed site condition, historical documents, invoices, as well as the emergency repair construction contracts and initial photo and video documentation. VRSA is awaiting the findings of the final investigation report, expected to be complete in late April/ early May.

Investigations – SEH Engineering completed its independent field investigations and performed a damage assessment inspection on the pump station electrical system. They developed a root cause analysis report – a 400 page review. During the past 30 days SEH has conducted follow-up discussions with staff to clarify operational protocols and historical system response. SEH is finalizing the collection system operation and river hydrology analysis as well as its technical investigation findings and the supporting appendices. Draft documents are under review by staff. Final documents are expected in late April/ early May.

Rehabilitation - Hazen Engineering, the original project design engineer, is coordinating removal and inspection of equipment. MEB Contractors assisted with draining of the interior pump station piping followed by the dismantling, cleaning, packaging, and removal of all six permanent pumps and motors. The pumps and motors are currently under factory review in North Carolina. Diagnostics are expected in the next 4 weeks. RWSA staff are working with the influent gate

manufacturer to assess rehabilitation and replacement alternatives as well as temporary flow control measures. An internal RWSA Technical Advisory Committee, a team comprised of RWSA staff, consultants, and contractors, will review existing and potential alternative pumping designs for the station rehabilitation. Once pumping objectives/changes are finalized, staff can proceed with design and replacement efforts. RWSA staff are also evaluating alternatives and purchasing equipment to repair the headworks plug valves associated with this project.

EPA Maximum Contaminant Levels for PFAS

On April 10, EPA announced the first National Primary Drinking Water Regulation for six PFAS compounds. PFAS is the "forever chemical" found in Teflon and other products, and cancer causing. The RWSA's proactive installation of Granular Activated Carbon water filters in 2018 continues to provide significant water quality benefits, as GAC is recognized as a leading technology to remove PFAS compounds from drinking water. RWSA has been monitoring the raw and treated water systems for PFAS since 2014, and except for one instance in 2023 at our North Rivanna WTP, all the samples have shown levels of PFAS below the new compliance levels. RWSA will continue to engage in the national discussion on implementation of the new regulation and assess any impact on the drinking water treatment systems.

RWSA Major Project Schedule	Construction Start Date	Construction Completion Date
-Airport Road Water Pump Station and Piping	December 2021	September 2024
-MC 5kV Electrical System Upgrades	May 2022	December 2024
-Red Hill Water Treatment Plant Upgrades	September 2024	March 2026
-South Fork Rivanna River Crossing	April 2025	December 2026
-Central Water Line	April 2025	December 2028
-MC Administration Building Renovation & Addition	April 2025	December 2027
-RMR to OBWTP Raw Water Line & Pump Station	December 2024	December 2028
-MC Building Upfits and Gravity Thickener Improvements	February 2025	December 2026
-MC Structure and Concrete Rehabilitation	February 2025	May 2027
-Crozet Pump Stations Rehabilitation	April 2025	December 2026
-Crozet WTP GAC Expansion – Phase I	August 2025	March 2027
-Beaver Creek Dam, Pumping Station, and Piping	April 2026	January 2029
-SFRR to RMR Pipeline, Intake, and Facilities	October 2025	December 2030

AGENDA ITEM EXECUTIVE SUMMARY

- **Airport Road Water Pump Station and Piping**

Design Engineer:	Short Elliot Hendrickson (SEH)
Contractor:	Anderson Construction
Construction Start:	December 2021
Percent Complete:	92%
Completion Date:	September 2024
Budget:	$10,000,000

Current Status:

Waterline installation, disinfection, and tie-ins to the existing system are complete. Paving and curb restoration along Berkmar Drive is proceeding. Pump station startup and testing is underway.

History:

The Route 29 Pipeline and Pump Station Master Plan was developed in 2007 and originally envisioned as 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.

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

Design Engineer:	Michael Baker International (Baker)
Project Start:	August 2018
Project Status:	92% design
Construction Start:	September 2024
Completion:	December 2028
Current Project Estimate:	$46,000,000

Current Status:

Design documents are being advanced to the bid-ready level. Staff continue to work with UVA on the final remaining easement, and the Design Engineer is also preparing final permitting submissions to all necessary agencies.

History:

Raw water is currently transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant by way of two 18-inch cast iron raw water lines, which have been in service for more than 110 and 70 years, respectively. The proposed water line will be able to reliably transfer water to the expanded Observatory Plant, which, upon completion, will

have the capacity to treat 10 mgd. The new single water line will be constructed of 36-inch ductile iron and will be approximately 14,000 feet in length.

The RMR to Observatory WTP raw water pump station will replace the existing Stadium Road and Royal Pump Stations, which have exceeded their design lives. The pump station will pump up to 10 mgd of raw water to the Observatory WTP. Integration of the new pump station with the planned South Rivanna Reservoir (SRR) to RMR Pipeline is being planned in the interest of improved operational and cost efficiencies and emergency redundancy. An integrated pump station would also include the capacity to transfer up to 16 mgd of raw water from RMR back to the SRR WTP.

- **South Rivanna Reservoir to Ragged Mountain Reservoir Pipeline, Intake and Facilities**

Design Engineer:	Kimley Horn/SEH/Schnabel
Project Start:	July 2023
Design Status:	20%
Construction Start:	October 2025
Completion:	December 2030
Current Project Estimate:	$80,000,000

Current Status:

Modifications to the RMR intake tower and perimeter clearing to allow for the 12- foot pool raise will be included in this project. A short section of the 36” raw water main has been constructed with the Victorian Heights housing development on Woodburn Road. Geotechnical borings for the new intake at SFRR were completed earlier this month, and the Design Engineer continues work on the overall concept for that facility. Installation of a nutrient analyzer at SFRR has been completed and is awaiting startup. This is the last step of the water quality study, and a final report is anticipated later this year.

History:

The approved 50-year Community Water Supply Plan includes the construction of a new raw water pipeline from the South Rivanna River to the Ragged Mountain Reservoir. This new pipeline will replace the Upper Sugar Hollow Pipeline along an alternative alignment to increase raw water transfer capacity in the Urban Water System. The project includes a detailed routing study and water line design to account for recent and proposed development and road projects in Albemarle County and the University of Virginia. Preliminary design, preparation of easement documents, and acquisition of water line easements along the approved route is also being completed as part of this project that will lead to final design and construction of the raw water line, reservoir intake and pump station.

AGENDA ITEM EXECUTIVE SUMMARY

- **Beaver Creek Dam, Pump Station, and Piping Improvements**

Design Engineer:	Schnabel Engineering (Dam)
Design Engineer:	Hazen and Sawyer (Pump Station)
Project Start:	February 2018
Project Status:	25% Design
Construction Start:	April 2026
Completion:	January 2029
Budget:	$47,000,000

Current Status:

Design work is underway by Hazen for the new raw water pump station, intake, raw water main, and hypolimnetic oxygenation system, and by Schnabel Engineering for final design of the dam spillway upgrades, temporary detour, and spillway bridge. Geological investigation work for the dam design will begin in May.

History:

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, and the dam be replaced. This CIP project includes investigation, preliminary design, public outreach, permitting, easement acquisition, final design, and construction of the anticipated modifications. Work for this project includes a new relocated raw water pump station and intake.

- **South Fork Rivanna River Crossing**

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2020
Project Status:	90% Design
Construction Start:	April 2025
Completion:	December 2026
Budget:	$7,300,000

Current Status:

Easement acquisition work is on-going. An easement package for a small temporary easement along Woodburn Rd has been sent to the property owner and will be required to access the VDOT property next to the water treatment plant and river. A purchase agreement package was sent to VEPCO for purchase of a small parcel along Rio Mills Rd since they preferred to sell the property to us rather than grant an easement. The final outstanding easement is with Albemarle County across the Brookhill Park property along Rio Mills Rd and this easement will be

presented to the Albemarle County Board of Supervisors in April 2024 and a public hearing will be held in May 2024. Once all easements are acquired, the Water Protection Ordinance requirements with the County can be finalized.

History:

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.

- **Central Water Line Project**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2021
Project Status:	90% Design
Construction Start:	April 2025
Completion:	December 2028
Budget:	$47,000,000

Current Status:

Completion of 90% construction documents was achieved in February. A workshop was held in mid-March to discuss the documents. The acquisition process for two private easements 4 has been initiated with our real estate consultant and RWSA will negotiate the third easement with UVA along Hereford Drive. Railroad permits were submitted in February 2024.

History:

The hydraulic connectivity in the Urban System is less than desired, creating operational challenges and reduced system flexibility and redundancy. 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 Urban service area, including the ACSA water service area.

This proposed new Central Water Line builds on the ACSA investments in additional water supply at Ragged Mountain and at the newly expanded Observatory Water Treatment Plant. This new line will allow a connection from the water plant to the urban water service areas of the ACSA.

ACSA Board Future Policy Issues Agendas 2024-2025

Regular 3rd Thursday Monthly Meetings

June '24	July '24	Aug. '24	Sept. '24	Oct. '24	Nov. '24	Dec. '24	Jan. '25	Feb. '25	Pending Issues
June 20th	**July 18th**	**August 15th**	**September 19th**	**October 17th**	**November 21st**	**December 19th**	**January 16th**	**February 20th**	Water Supply Plan Project Status Reports
Recognitions	Recognitions Montie Madison 25 years	Recognitions Terri Knight 35 years	Recognitions Scott Krebelder 30 years	Recognitions	Recognitions Jennifer Bryant 25 years Roland Bega 25 years	Recognitions	Recognitions	Recognitions	RWSA CIP Central Water Line-Reservoirs Pipeline North Rivanna System Wastewater Projects
Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Monthly Financial and CIP Reports	Rivanna Pump Station Update
Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Capital Project Authorizations	Annual Water Quality Reports (May)
			Operational Presentation	Operational Presentation	Operational Presentation	Operational Presentation	Operational Presentation	Operational Presentation	Board Organizational Meeting each January
									Annual Report - January
FY '25 Budget and Rates Public Hearing	Strategic Plan Update	Request for Approval - Annual Year-End Appropriations	Imagine a Day Without Water Resolution	Lead / Copper Inventory & Regulations Report and Update	Long Term Financial Plan and Rate Study Analysis	Annual Investments Report	Board Organizational Meeting		Water Audit
									Construction Specifications Approval
									Grants
									CIS - Customer Information Systems - Billing, Website, Phone
FY '25 Budget, Rates and CIP Approval	Customer (CIS) Report and Update				Annual Financial Report	FY2026 Budget Guidelines and Schedule	Annual Report		Strategic Plan Updates-2023-2027 January and July
									Fats, Oils, and Grease (FOG) Program
									Climate Change and Sustainability
Amendments to Rules and Regulations, and Personnel Management Plan (Budget Implementation)	Financial Plan and Rate Study Scope of Work Discussion				Market Pay Study Report and Recommendations		Strategic Plan Update		Annual Water Conservation Report - January
									Operational Presentation-Sewer Rehab Relining; Trenchless Technology
Water & Wastewater Professionals Appreciation Day Recognition	Rivanna Pump Station Status Report								Fix a Leak Week - March National Drinking Water Week-April Imagine a Day Without Water - September
									New Development - Warranty
									Federal/State Water Quality Regulations Lead and Copper (12/24); PFAS; Emerging Contaminants
									Emergency Preparedness ACSA 60th Anniversary 2024-25
									Annual Investments Report December
									Operational Presentations
									ACSA Customer Communications
									Avon Satellite Operations Center
									Data Management and Management Dashboards
									Purchasing Policy Revisions
									Customer Experience (CX)
									Pay Plan Market Rate Study for FY' 25 - Compensation (Fall)

5/16/2024

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Annual Water Quality Report	**AGENDA DATE:** May 16, 2024
STAFF CONTACT(S)/PREPARER: Jeremy M. Lynn, P.E., Director of Engineering and Tim Brown, Environmental Compliance Specialist	**CONSENT AGENDA:** **ACTION:** ☐ **INFORMATION:** ■ **ATTACHMENTS:** YES

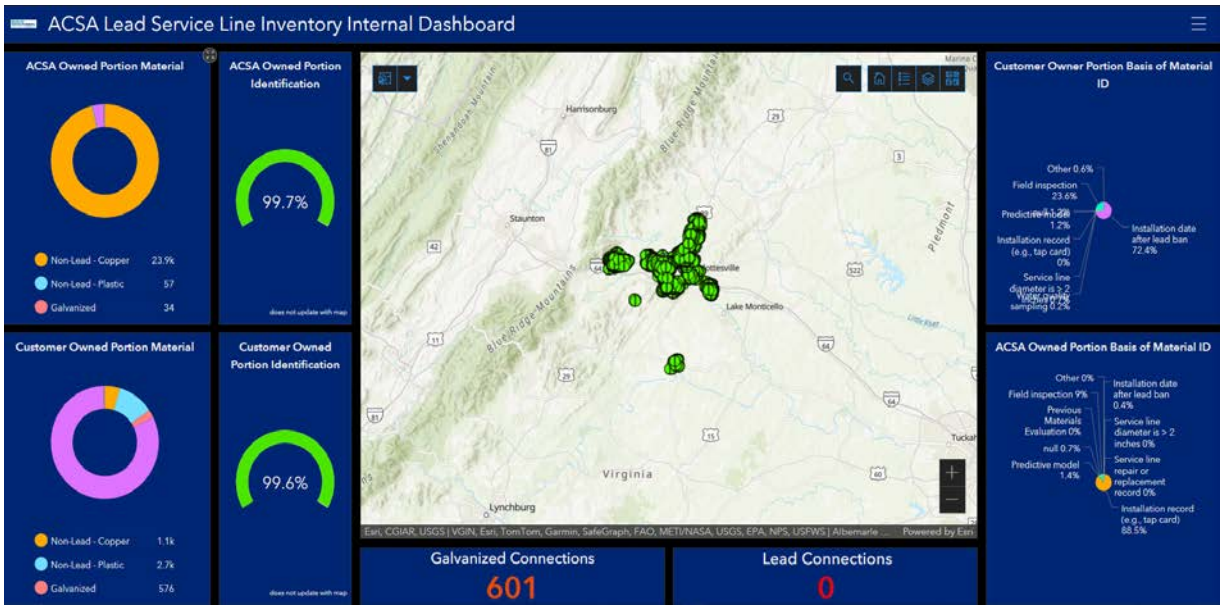
BACKGROUND: Below are some updates related to various water quality items and regulations:

- **Annual Consumer Confidence Reports** – These are also known as Water Quality Reports and are required by the Virginia Department of Health to be published annually for each of our distribution systems. ACSA customers are informed through the typical billing notifications each year when the reports are made available on our website. These reports are a culmination of more than 400,000 water tests performed and provide a wealth of information pertaining to the high-quality water we serve to our customers, including information on Granular Activated Carbon (GAC), Per- and Polyfluoroalkyl Substances (PFAS), Revised Lead and Copper Rule, Cryptosporidium, Fluoride, and more.

- **Lead and Copper Rule Revisions** – The Lead and Copper Rule Revisions (LCRR) became effective December 16, 2021, with all components of the revised rule to be implemented by October 16, 2024. The biggest component of the revised rule that impacts the ACSA is the requirement that all utilities perform service line identification and inventory on both the public and private side. We currently have fewer than 100 unknown service line materials remaining to complete our inventory efforts (see screenshot of our dashboard below). **To date, we have not found any lead service lines in our system.** The LCRR also requires water systems to conduct directed public education and lead sampling in schools and childcare facilities. ACSA staff have begun communications with Albemarle County Public Schools (ACPS) about lead and copper testing that is set to begin in 2025. ACPS conducted extensive testing in 2016 and 2018 with excellent results. The ACSA has also started our work with private schools and childcare facilities to test their sites.

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY



- **<u>Per- and Polyfluoroalkyl Substances (PFAS)</u>** – On April 10, 2024, the United States Environmental Protection Agency (EPA) announced the final National Primary Drinking Water Regulation for six per- and polyfluoroalkyl substances (PFAS). According to the EPA, scientific studies have shown that exposure to PFAS in the environment may be linked to harmful effects on humans and animals. The Rivanna Water and Sewer Authority (RWSA) has been monitoring PFAS levels since 2014 and has been a participant in the EPA's Unregulated Contaminant Monitoring Rule water sampling program since 2023. Except for one instance at the North Rivanna Water Treatment Plant, no sample has shown levels of PFAS exceeding the new compliance regulations. The use of GAC filters is considered a leading technology in the removal of PFAS compounds from drinking water.

BUDGET IMPACT: None.

RECOMMENDATIONS: None.

BOARD ACTION REQUESTED: No Board action requested. Information only.

ATTACHMENTS:

- Urban Area 2024 Annual Drinking Water Report
- EPA's Lead and Copper Rule Revisions (LCRR) Frequently Asked Questions (FAQs)
- EPA's PFAS National Primary Drinking Water Regulation Fact Sheet

Albemarle County Service Authority

Serving Conserving

Urban Area 2024 Annual Drinking Water Report

Includes Water Testing for 2023

CONTENTS

Successfully Meeting Water Quality Challenges

Dear Customer,

The ACSA and the Rivanna Water and Sewer Authority (RWSA), in partnership with the Virginia Department of Health (VDH), work cooperatively to ensure our customers receive a safe and reliable supply of drinking water. The RWSA collects, stores and treats the water, while the ACSA purchases the finished water and delivers it to our customers through our distribution system. Our dedicated staff work hard every day to ensure your water is always there when you turn on the tap.

Our collective efforts to provide you with the highest quality drinking water never end. Not only is the ACSA working to fully comply with the EPA's lead, copper and PFAS standards; the ACSA has also been proactive with testing and will continue to monitor and provide updates on any levels detected in our water.

Last year the EPA announced new proposed drinking water standards for a few PFAS. We expect these to be finalized in the coming months. While these chemicals have not been found in our finished water, the ACSA will test for more of these compounds in the coming years so we can continue to assess the situation. I assure you the ACSA and RWSA are confident in our ability to protect you from concerning levels of these substances.

A major factor in keeping your water of the highest quality is our continued investment in our infrastructure. Throughout our decades of service, the ACSA has been able to meet the many water quality challenges we've faced because of the willingness of our customers to invest in our systems when other communities across the country have been hesitant. It is because of your commitment that our services remain safe, resilient, and prepared for the future.

Last year we unveiled our 2023 through 2027 Strategic Plan, which uses input from our customers and our employees to prioritize our short and long-term organizational work as we strengthen our infrastructure. You can learn more about our plan at www.serviceauthority.org.

The ACSA is committed to providing you, the customer, with this water quality report because informed customers are our best allies. If you wish to receive a printed copy of the report, contact Tim Brown at **(434) 977-4511, Ext. 119** or at **tbrown@serviceauthority.org.**

Thank you again for being our customer.

Gary O'Connell

Gary O'Connell, Executive Director

ACSA Board of Directors

Richard Armstrong, Chair - Scottsville District
Charles Tolbert, Vice Chair - Jack Jouett District
Dr. Lizbeth Palmer - Samuel Miller District
John Parcells - White Hall District
Clarence Roberts - Rivanna District
Kimberly Swanson - Rio District

The ACSA Board of Directors holds meetings on the third Thursday of each month at 9am at 168 Spotnap Road. Call **(434) 977-4511** or visit **www.serviceauthority.org** for more information.

The Rivanna Water & Sewer Authority (RWSA) Board of Directors holds meetings on the fourth Tuesday of each month at 2pm at 695 Moore's Creek Lane. Call **(434) 977-2970** or visit **www.rivanna.org** for more information.

Your Water Supply & Treatment

The RWSA operates three water treatment plants (WTP) to provide water to the City of Charlottesville and the urban ring served by the ACSA. The South Rivanna WTP is sourced by the South Rivanna Reservoir; the Observatory WTP is sourced by the Ragged Mountain and Sugar Hollow Reservoirs; and the North Rivanna WTP is sourced by the North Fork Rivanna River.

The Source Water Assessment of the South Rivanna Reservoir watershed was updated in 2020 by the Virginia Department of Health (VDH). VDH determined the reservoir's "relative susceptibility to contamination" to be high due to its surface water being exposed to an inconsistent array of contaminants at varying concentrations. This assessment is due to changing hydrologic, hydraulic, and atmospheric conditions with potential sources of contamination in one of the zones of the reservoir's assessment area.

All water sources are surface water supplies, replenished by precipitation, stream flow, overland flow and groundwater flow. All supplies have a low mineral content, are low in hardness or scale (soft), and there is little of the iron or manganese commonly found in the area's groundwater. The treated water does not have any iron or manganese.

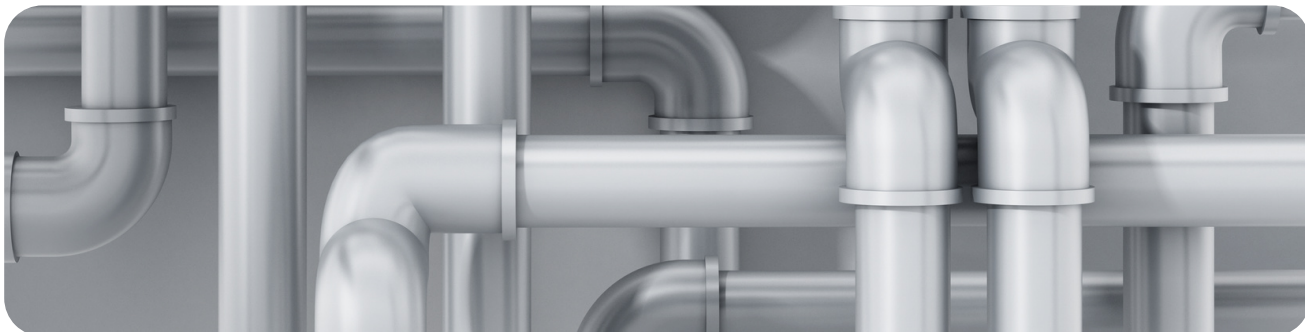
Each plant employs both physical and chemical treatment processes before releasing water into the distribution system. Sodium hypochlorite is used at all three plants to disinfect the treated water. Fluoride is added at each plant to promote good dental health. The origin of the water provided to your tap may vary from time to time depending on demand, the level of storage in the system, and your location.

Significant upgrades to all three plants were completed in 2018 related to the Stage 2 Disinfection Byproducts Rule. An advanced treatment process that employs granular activated carbon (GAC) was installed to result in higher quality water. In particular, the concentration of disinfection byproducts (TTHMs and HAAs; see discussion of contaminants) has been significantly reduced. In addition to lowering these chemical compounds, GAC serves as a barrier to other potential contaminants and improves certain taste and odor issues.

Water Treatment for Corrosion Control

It is standard practice that a phosphate chemical be added to drinking water supplies during treatment in order to reduce corrosion of the metal pipes in the distribution system and in customer plumbing. The chemical forms a protective layer on the inside of the pipes, reducing corrosion and the possibility of mainly lead and copper from entering the water.

For more than 30 years, the RWSA used a polyphosphate product for corrosion control, and it was very effective in keeping lead and copper out of customer water supplies. The RWSA evaluated and implemented a new, blended, orthophosphate product to optimize distribution system lead and copper corrosion control in February 2021, with a shift to an all orthophosphate product in February 2022. This change received full VDH approval.



Advanced Treatment Using Granular Activated Carbon (GAC)

Granular activated carbon (GAC) is very effective in improving water quality in distribution systems. It was added to all of our treatment processes to aid in the additional removal of organics that, when combined with chlorine, create disinfection byproducts (DBPs) regulated by the EPA. GAC also provides improved water taste and odor, and it is proven to be highly effective at removing both manufactured and naturally occurring contaminants that are discovered in a growing number of water supplies across the country. (See the related section on PFAS.) While testing has shown our service areas are not impacted by these contaminants, GAC provides an added level of treatment for the protection of our drinking water.

Installation of the GAC systems was completed in 2018 and the reduction of DBPs has been significant. We are extremely proud of the results because they demonstrate how community support and investment in our water treatment will result in excellent drinking water quality now and for years to come.

Water Quality Standards

The information in this report has been collected and reported in accordance with the drinking water standards established by the U.S. EPA and the VDH. The RWSA conducts extensive testing of the source waters and treated water before it ever leaves the plant, as well as testing weekly, monthly and quarterly samples within the distribution system.

In addition to the data contained in this report, other testing includes such parameters as "heavy" metals, volatile organic compounds, semi-volatile organic compounds, herbicides and pesticides in the treated water. They are not listed here since none of these parameters was detected. More specific information can be obtained by contacting Tim Brown at **(434) 977-4511, ext. 119,** or at **tbrown@serviceauthority.org.**

More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline **(800-426-4791)** or by visiting their website **(www.epa.gov/safewater).** You can also see the section on Cryptosporidium in this report.

As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals, and in some cases radioactive material, as well as substances resulting from the presence of animals and human activities. In other words, all surface water supplies are exposed to a wide array of "contaminants" at varying concentrations. However, the presence of these contaminants does not necessarily indicate that water poses a health risk. Even bottled water may reasonably be expected to contain at least minimal amounts of some contaminants.

Internal Issues of Mold

The most common water-related complaint we have received from our customers over the years is the occasional appearance of a black growth in toilets, and in fixtures like faucets and shower heads. This is a harmless form of mold; the water is completely safe to drink. The mold is not coming into your home through our water pipes. Instead, the mold is the result of airborne spores, and the level of chlorine in the water cannot prevent mold growth. The spores come from hardwood forests, construction sites, and mulch piles. In particular, we have seen a very clear link between mold and mulch supplies for several years.

Testing has shown the mold to be very common types. More information, including tips on controlling mold, is found at **www.serviceauthority.org/waterqualitysupply/water-quality** or by calling Tim Brown at **(434) 977-4511, ext. 119.**

Per- and Polyfluoroalkyl Substances (PFAS)

Per- and polyfluoroalkyl substances, known more commonly as PFAS, are a group of manufactured chemicals that have been used in industry and consumer products since the 1940s because of their heat, water, and stain resistance. There are thousands of different PFAS compounds, a few of which have been more widely used and studied than the others.

PFAS are found in many products in use every day, including:

- Fire extinguishing foam: In aqueous film-forming foams (or AFFFs) used to extinguish flammable liquid-based fires. Such foams are used in training and emergency response events at airports, shipyards, military bases, firefighting training facilities, chemical plants and refineries.
- Manufacturing or chemical production facilities that produce or use PFAS: For example, at chrome-plating, electronics, and certain textile and paper manufacturers.
- Food: Some examples include fish caught from water contaminated by PFAS and dairy products from livestock exposed to PFAS.
- Food packaging: For example, in grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes and candy wrappers.
- Household products and dust: For example, in stain and water-repellent products used on carpets, upholstery, clothing, and other fabrics; cleaning products; non-stick cookware; paints, varnishes and sealants.
- Personal care products: For example, in certain shampoos, dental floss and cosmetics.

PFAS can also be found in drinking water from public systems and private wells.

Due to their widespread production and use, as well as their ability to move and persist in the environment, surveys conducted by the Centers for Disease Control and Prevention (CDC) have shown that most people in the United States have been exposed to some PFAS. Most known exposures are relatively low but can be elevated, particularly when people are exposed to a concentrated source over long periods of time. Some PFAS chemicals can accumulate in the body over time.

Current scientific research suggests that exposure to high levels of certain PFAS may lead to adverse health outcomes. However, research is still ongoing to determine how varying levels of exposure to different PFAS can lead to a variety of health effects.

Sampling associated with the EPA's Fifth Unregulated Contaminant Monitoring Rule (UCMR 5) is being conducted nationwide between 2023 and 2025. We will test our water for 29 PFAS compounds (plus lithium) under UCMR 5 to help the EPA assess the public health and environmental risks of these substances in drinking water. See the section on UCMR 5.

In March 2023, the EPA announced proposed national drinking water standards, known as Maximum Contaminant Levels (MCLs), for two PFAS compounds, PFOA and PFOS, at four (4) parts per trillion each. The EPA also announced a proposed "Hazard Index" calculation for four additional PFAS compounds that establishes an MCL for the mixture if it rises above a certain level. Following public comment and scientific review processes, it was anticipated that the new standards would be announced in early 2024. As of March 1, 2024, this has not occurred. The effective date for the new standards will likely be three years after the date of the announcement.

While there is significant debate about the EPA's proposed standards and Hazard Index, the ACSA can report that, based on past testing, PFAS compounds are not a significant issue in the Urban Area, as well as in our other service areas. While we were not required to do so, the ACSA has worked with the RWSA for several years to monitor PFAS compounds in your water.

In ten (10) rounds of testing between December 2018 and February 2024 involving the source water and treated water of six treatment plants managed by Rivanna Water and Sewer Authority, PFOA has been detected on only one occasion at 2.1 parts per trillion (ppt). PFOS has never been detected. The reporting limit used by the certified contract laboratory for testing was 2.0 ppt or less. Testing will continue in 2024.

As mentioned earlier, the ACSA uses advanced water treatment in the form of granular activated carbon (GAC), which has been proven to be highly effective in removing PFAS compounds.

Revised Lead and Copper Rule

The Environmental Protection Agency's (EPA) Lead and Copper Rule (LCR), first established in 1991, recently underwent its most extensive revision in 30 years to reduce the risks of lead exposure. This will be accomplished by better protecting children at schools and childcare facilities, getting the lead out of our nation's drinking water, and empowering communities through information.

Improvements under the new rule, which have an effective date of October 2024, include:

- Using science-based testing protocols to identify more lead sources in drinking water.
- Lowering the lead "action level" to jumpstart mitigation earlier and in more communities.
- Mandating more and complete lead service line replacements.
- For the first time, requiring testing in schools and childcare facilities.
- Requiring water systems to identify and make public the locations of lead service lines.

As the ACSA and RWSA develop our compliance plans for the new LCR, we want you to know we have been proactive about lead and copper in several ways. We began service line material identification in 2021 and, to date, **we have not found any lead service lines in our systems.** Meter setters with a lead content were removed years ago.

As mentioned earlier, the RWSA recently conducted detailed corrosion-control studies of all treatment plants and implemented slight changes in the chemical used to inhibit corrosion.

The ACSA and RWSA have decades of excellent lead and copper test results. Since 2016, just under 97% of all samples (350 out of 362) have had undetectable levels of lead.

As of March 1, 2024, the materials used in the service lines for nearly 99% of the ACSA's customers have been documented. **We have not identified any lines containing lead.**

Communication has begun with Albemarle County Public Schools (ACPS) about lead and copper testing that is set to begin in 2025 in accordance with the revised Lead and Copper Rule. ACPS conducted extensive testing in 2016 and 2018 with excellent results. The ACSA has also started our work with private schools and childcare facilities to test their sites in accordance with the LCR.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and internal plumbing. RWSA and the ACSA are responsible for providing high-quality drinking water; it is non-corrosive, has a corrosion inhibitor added to coat the pipes, and is delivered to you in pipes that are free of lead.

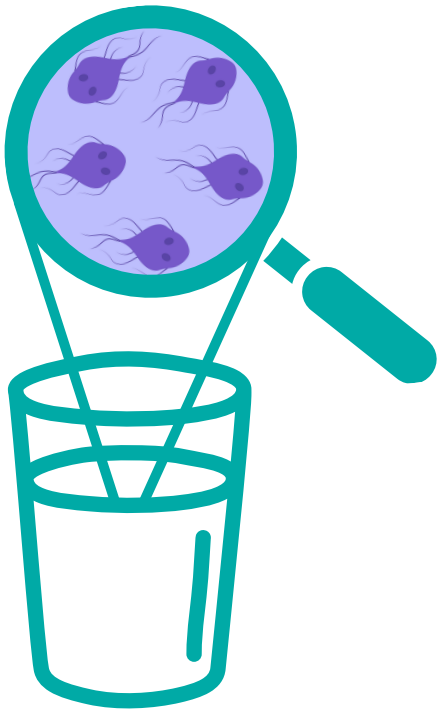
However, we cannot control the variety of materials used in the plumbing components of houses and businesses. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested. The periodic lead and copper testing at select, high-risk households last occurred in the summer of 2022 (see the accompanying data chart).

A trace amount of lead was found in only one of the 30 samples in 2022, and it was the result of minimal water use in the home for several months. Information on lead in drinking water, testing methods, and steps you can take to reduce exposure is available from the Safe Drinking Water Hotline (800-426-4791) or at www.epa.gov/safewater/lead.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface waters throughout the U.S. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection characterized by nausea, diarrhea, and abdominal cramps. Cryptosporidium may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at risk of developing a potentially life-threatening illness.



Although filtration removes the pathogen, the most commonly used filtration methods cannot guarantee 100% removal. The RWSA makes every effort to optimize the filtration process at all of the WTPs to ensure the greatest degree of Cryptosporidium removal. Based on the results of recent studies, our water sources have been placed in the lowest risk category for exposure to Cryptosporidium.

Fluoride

The naturally-occurring fluoride content of our source waters (reservoirs and streams) is quite low. Therefore, fluoride is added to your water at treatment plants to promote good dental health. Fluoridation of drinking water was first introduced in the U.S. in the 1940s, and the Centers for Disease Control and Prevention named it one of the ten great public health achievements of the 20th century.

In 2011, the U.S. Department of Health and Human Services (DHHS), jointly with the U.S. Environmental Protection Agency (EPA), recommended that the level of fluoride added to drinking water be reduced from a range of 0.7-1.2 ppm to 0.7 ppm.

The main reason for this action is that Americans have access to more sources of fluoride than they did decades ago. In addition to the fluoride added to many public water supplies, it is found in toothpastes and mouth rinses, and is routinely applied to children's teeth by dental professionals.

DHHS officially decreased the recommended level of fluoride in drinking water to 0.7 ppm in 2015. The range of fluoride added to your water in 2023 was 0.62 - 0.91 parts per million (ppm).

UCMR 5

The federal Safe Drinking Water Act amendments of 1996 require the EPA to publish a list of 30 unregulated contaminants every five (5) years. These are contaminants in treated water that are currently unregulated yet are of concern as to the safety of drinking water supplies should the contaminants be present above a certain threshold. The contaminants are tested by public water supplies across the country over a three-year period. This monitoring requirement is known as the Unregulated Contaminant Monitoring Rule (UCMR), and we are currently in the fifth round of such testing.

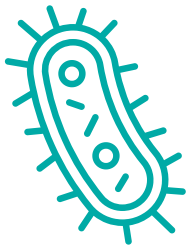
The 30 contaminants for UCMR 5 include 29 PFAS compounds and the metal lithium. The extreme focus on the PFAS compounds mirrors the attention these chemicals have received in the past few years.

The RWSA was required to sample quarterly for a 12-month period at the South Rivanna and Observatory treatment plants serving the Urban system, and at the Crozet treatment plant for the separate Crozet system. Samples were collected between May 2023 and February 2024, and analyzed by a major certified laboratory in the Midwest.

We are very pleased to report that there were no detectable compounds in any of the 12 samples (three sample locations for four events). The detection limits for the PFAS compounds were from 2-5 parts per trillion (ppt), and for lithium it was 9 parts per billion (ppb).

This is yet another testament to the quality of the drinking water we deliver to you, our customer.

Potential Health Risks Associated With These Contaminants



Total and Fecal Coliform Bacteria

Coliforms are a large group of bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present. Fecal coliform bacteria and E. coli, in particular, indicate a likely contamination from human or animal wastes. These microorganisms can result in short-term effects such as nausea, headache, cramps and diarrhea, and they pose a special health risk for infants, young children, the aged, and those with severely compromised immune systems.

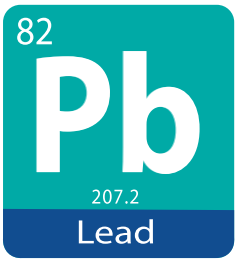
Turbidity

Turbidity is a measure of the clarity of water. On its own, elevated turbidity has no health effects. However, turbid water can interfere with disinfection and may provide a medium for microbial growth. Elevated turbidity may also indicate the presence of disease-causing organisms, including bacteria, viruses or parasites that can cause such symptoms as nausea, headache, cramps and diarrhea.

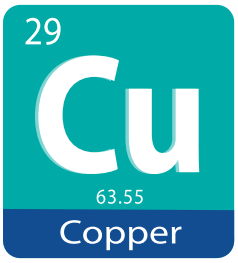
Combined Radium, Gross Alpha and Gross Beta

These are naturally-occurring forms of radiation, resulting from certain minerals that are radioactive. When these minerals are eroded into the source water, radiation in the water may result. Some people who drink water containing radium, or alpha or beta emitters, over many years may have an increased risk of getting cancer.

Potential Health Risks Associated With These Contaminants



Lead and Copper
The EPA Lead and Copper Rule mandates a household testing program for these metals, and the values reported in the chart are from samples that were collected from select households. Infants and children who drink water containing lead in excess of the Action Level could experience delays in physical or mental development. Children could show deficits in attention span and learning abilities.



Adults who drink this water over many years could possibly develop kidney problems or high blood pressure. See the earlier section for additional information on lead. Copper is an essential nutrient, but some who drink water containing copper in excess of the Action Level could experience gastrointestinal distress in a relatively short period of time. Some who drink this water over many years could develop kidney or liver damage. Individuals with Wilson's disease should consult their doctor.

Barium
Barium is a metal that is naturally-occurring in rock and the soil. Some people who drink water containing barium in excess of the MCL over many years may experience an increase in their blood pressure.

Fluoride
Fluoride is an element added at the water treatment plants to promote strong teeth. Some people who drink water containing fluoride in excess of the MCL over many years could develop bone disease, with pain and tenderness of the bones. Children who drink water containing fluoride in excess of the MCL may develop mottled teeth. See the separate section for additional information on fluoride.

Chlorine
Chlorine is added at the treatment plant to inactivate disease-causing microbes. Some people who use water containing chlorine in excess of the MRDL could experience irritation of the eyes, nose and skin. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Potential Health Risks Associated With These Contaminants

Nitrate

Nitrate is a form of nitrogen found primarily in fertilizers, sewage, and runoff from natural deposits. Infants below the age of six months who drink water containing nitrate in excess of the MCL could develop "blue baby syndrome" in which there is a bluish coloration of the skin and shortness of breath. The infant can become seriously ill and, if untreated, may die.

Trihalomethanes and Haloacetic Acids

These are compounds formed by the interaction of chlorine with naturally-occurring organic matter, and they are sometimes referred to as disinfection by-products. Chlorine is added at the treatment plant to deactivate disease-causing microbes, and organic matter is naturally present from leaves and decaying plants in the reservoirs and streams.

Some people who drink water containing these compounds in excess of the MCL over many years may experience problems with their liver, kidneys or central nervous system, and may have an increased risk of getting cancer.

What If I Am Immunocompromised?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons, such as those undergoing chemotherapy; people who have undergone organ transplants; persons with HIV/AIDS or other immune system disorders; and some elderly and infants can be particularly at risk from infections. These people should seek advice from their healthcare providers about drinking water.

EPA and CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from EPA's Safe Drinking Water Hotline **(800-426-4791)** or by visiting their website at **www.epa.gov/safewater.**

2023 Water Quality Test Results

Primary Standards - Potential Health Risk	MCLG	MCL	Urban Area Water Results	# Samples > AL	Range of Detections	Violation?	Typical Source of Contaminant
MICROBIOLOGICAL ORGANISMS; RELATED MEASUREMENTS							
Total Coliform Bacteria (1)	0	Presence in 5% of samples per month	0 per mth. (2)	N/A	0 per month	No (2)	Naturally present in the environment
Fecal Coliform Bacteria (1)	0	See footnote (3)	0 per month (2)	N/A	0 per month	No (4)	Human and animal fecal waste
Turbidity (max. single value)	N/A	1 (5)	0.17 NTU	N/A	N/A	No	Soil runoff
Turbidity (% of monthly samples below 0.3 NTU)	N/A	At least 95% (5)	98%	N/A	N/A	No	Soil runoff
RADIOACTIVE COMPOUNDS							
Combined Radium (6)	0 pCi/l	5 pCi/l	0.9 pCi/l	N/A	< 0.5 - 0.9 pCi/l	No	Erosion of natural deposits
Gross Alpha (6)	0 pCi/l	15 pCi/l	< 0.38 pCi/l	N/A	< 0.3 - < 0.38 pCi/l	No	Decay of natural deposits
Gross Beta (6,7)	0 pCi/l	50 pCi/l	1.7 pCi/l	N/A	1.1 - 1.7 pCi/l	No	Erosion of natural deposits

Primary Standards - Potential Health Risk	MCLG	MCL	Urban Area Water Results	# Samples > AL	Range of Detections	Violation?	Typical Source of Contaminant
INORGANIC COMPOUNDS							
Lead (8)	0 ppb	15 ppb (AL)	< 2.00 ppb (9)	0	< 2.00 - 8.72 ppb	No	Corrosion of household plumbing
Copper (8)	1.3 ppm	1.3 ppm (AL)	0.061 ppm (9)	0	< 0.020 - 0.134 ppm	No	Corrosion of household plumbing; erosion of natural deposits
Barium	2 ppm	2 ppm	0.030 ppm	N/A	< 0.010 - 0.030 ppm	No	Erosion of natural deposits; drilling waste discharges
Fluoride	4 ppm	4 ppm	0.87 ppm	N/A	0.62 - 0.91 ppm	No	Water additive that promotes strong teeth
Nitrates	10 ppm	10 ppm	0.07 ppm	N/A	< 0.05 - 0.07 ppm	No	Fertilizer runoff
DISINFECTION & DISINFECTION BYPRODUCT CONTAMINANTS							
Free Residual Chlorine	MRDL = 4 ppm	MRDLG = 4 ppm	1.21 ppm (10)	N/A	0.21 - 2.13 ppm	No	Water additive to control microbes (disinfectant)
Total Trihalomethanes (TTHMs)	0	80 ppb	37 ppb (11)	N/A	3 - 53 ppb	No	Disinfection byproduct
Haloaectic Acids (HAAs)	0	60 ppb	22 ppb (11)	N/A	5 - 46 ppb	No	Disinfection byproduct

Secondary Standards / Aesthetic Factors	MCLG	MCL	Urban Area Water Results	# Samples > AL	Range of Detections	Violation?	Typical Source of Contaminant
Chloride	N/A	250 ppm	11.9 - 18.2 ppm	N/A	11.9 - 18.2 ppm	No	Runoff/leaching of natural deposits
Iron	N/A	0.3 ppm	< 0.05 ppm	N/A	N/A	No	Runoff/leaching of natural deposits
Manganese	N/A	0.05 ppm	< 0.01 ppm	N/A	N/A	No	Runoff/leaching of natural deposits
pH	N/A	6.5 - 8.5 S.U.	7.4 - 7.6 (mth. avg.)	N/A	7.4 - 7.6 (mth. avg.)	No	Runoff/leaching of natural deposits
Sulfate	N/A	250 ppm	< 5.0 - 19.9 ppm	N/A	< 5.0 - 19.9 ppm	No	Runoff/leaching of natural deposits
Total Dissolved Solids	N/A	500 ppm	64 - 106 ppm	N/A	64 - 106 ppm	No	Runoff/leaching of natural deposits
OTHER PARAMETERS OF INTEREST							
Alkalinity	N/A	N/A	21 - 54 ppm (mth. avg.)	N/A	21 - 54 ppm	N/A	Runoff/leaching of limestone minerals
Conductivity	N/A	N/A	114 - 170 micromhos/cm	N/A	114 - 170 micromhos/cm	N/A	Runoff/leaching of natural deposits
Hardness	N/A	N/A	20 - 40 ppm	N/A	20 - 40 ppm	N/A	Runoff/leaching of limestone minerals
Sodium	N/A	N/A	9.34 - 24.6 ppm	N/A	9.34 - 24.6 ppm	N/A	Runoff/leaching of natural deposits

What Do All the Numbers Mean?

First, they show your drinking water met or exceeded all regulatory requirements during 2023. We are fortunate to have reliable sources for your drinking water needs, and well-operated treatment facilities. The information provides you with details on each potentially harmful contaminant or compound detected in your drinking water.

Footnotes

(1) Unit of measurement for total and fecal coliform bacteria is the presence or absence of bacteria in a 100 ml sample.

(2) Of the 1,056 routine samples collected in 2023, **no sample indicated the presence of total coliform bacteria.**

(3) Fecal coliform MCL: A routine sample and a repeat sample are total coliform positive, and at least one is also fecal coliform positive.

(4) No repeat sample indicated a positive result for fecal coliform bacteria or total coliform bacteria.

(5) The MCL for turbidity is for no single measurement to exceed 1 NTU, and for 95% of all measurements to be below 0.3 NTU.

(6) Last sampled in 2017. To be sampled again in 2024.

(7) The EPA considers 50 pCi/l to be the level of concern for beta particles.

(8) Sampled in July 2022 from 30 select, high-risk residences. The one detectable value was the result of minimal water usage in the tested home for several months. All locations will be sampled again in 2025.

(9) The value reported is the 90th percentile of all data (30 samples) collected.

(10) The value reported is the highest running annual average. Range is all individual samples.

(11) TTHM and HAA results are averaged over four quarters at each sampling location to determine compliance with the MCL. Range of detections is from 2023, but "Results" includes late 2022 and 2023.

Definitions

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are as close to the MCLGs as possible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. The addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to public health.

ppm: Parts per million or milligrams per liter (mg/l). One part substance per million parts of a solution.

ppb: Parts per billion or micrograms per liter (ug/l). One part substance per billion parts of a solution.

ppt: Parts per trillion or nanograms per liter (ng/l). One part substance per trillion parts of a solution.

P-Ci/l: Picocuries per liter. This is a measure of radioactivity.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other actions by the water provider. This term is typically limited to discussions of lead and copper concentrations.

Standard Units (S.U.): This is a measure of pH.

N/A: Not applicable.

<: Less than.

Albemarle County Service Authority
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Should you have any further questions, please contact our Environmental Compliance Specialist at **977-4511, ext. 119,** or by email at **tbrown@serviceauthority.org.**

FAQ

Lead and Copper Rule Revisions (LCRR) Frequently Asked Questions (FAQs)

These Frequently Asked Questions (FAQs) address the parts of the 2021 Lead and Copper Rule Revisions (LCRR) that EPA has proposed to keep starting October 16, 2024. The FAQs only reflect federal requirements for these provisions. Your State[1] may have additional regulatory requirements.

General 2021 Lead and Copper Rule Revisions (LCRR)

What requirements of the LCRR is EPA proposing to retain?

EPA is proposing to keep the LCRR October 16, 2024, compliance date for the initial inventory, notification of service line material, Tier 1 public notification of a lead action level exceedance, and associated reporting requirements. Please see sections below for the FAQs specific to each of these requirements.

What systems do LCRR requirements apply to?

All community water systems (CWS) and non-transient non-community water systems (NTNCWS) must comply with these requirements.

When do water systems have to comply with the retained LCRR requirements?

Under EPA's new proposal as well as existing rules, water systems must comply with the following 2021 LCRR requirements beginning **October 16, 2024:**

Initial Service Line Inventory

What are the initial service line inventory requirements?

All CWSs and NTNCWSs must complete and submit an initial service line inventory to their State[1] by October 16, 2024. The inventory must include all service lines connected to the public water distribution system regardless of ownership status. Each service line must be characterized as lead, galvanized requiring replacement, lead status unknown (or unknown), or non-lead using approved sources (noted below).

The service line inventory must also be publicly accessible, and the publicly accessible inventory must include locations for lead and galvanized requiring replacement service lines. Water systems serving greater than 50,000 persons must make the publicly accessible inventory available online. EPA's *Guidance for Developing and Maintaining a Service Line Inventory* provides details on these requirements.

What are the required information sources for water systems to use to develop the initial inventory?

To identify service line materials, water systems must use information identified through previous materials identification and review the following sources of information:

- All construction and plumbing codes, permits, and existing records or other documentation which indicates the service line materials used to connect structures to the distribution system.

[1] "State" for purposes of this document means the agency of the State or Tribal government which has jurisdiction over public water systems. During any period when a State or Tribal government does not have primary enforcement responsibility pursuant to section 1413 of the Act, the term "State" means the Regional Administrator, U.S. Environmental Protection Agency. [40 CFR 141.2]

- All water system records, including distribution system maps and drawings, historical records on each service connection, meter installation records, historical capital improvement or master plans, and standard operating procedures.
- All inspections and records of the distribution system that indicate the material composition of the service connections that connect a structure to the distribution system.
- Any resource, information, or identification method provided or required by the State.

While not required by the EPA, water systems may use other sources for the inventory, if approved by the State. Please contact your State for any specific information or guidelines they may have on service line inventories. Additionally, information regarding identification methods is available in EPA's Guidance for Developing and Maintaining a Service Line Inventory.

What are the requirements for water systems whose service lines are all non-lead?

Water systems that have all non-lead service lines must still prepare an initial service line inventory and submit it to their State. However, to comply with the requirement for a publicly accessible inventory these systems may use a written statement, instead of an inventory, declaring that the distribution system has no lead lines, galvanized requiring replacement lines, or unknown lines. The statement must include a general description of the applicable sources used to make this determination. If in the future, the water system finds a lead service line, the system must notify the State within 30 days of discovery and submit an updated inventory on a schedule established with their State.

Where can I find more information on how to create an initial service line inventory?

EPA's Guidance for Developing and Maintaining a Service Line Inventory, Small Entity Compliance Guide, and Fact Sheet for Developing and Maintaining a Service Line Inventory. provide helpful information to help systems with their service line inventory. You can also find a template for completion of the inventory here.

Is funding available to help water systems complete an initial service line inventory?

To help communities identify potential federal funding for service line inventories and lead service line replacement, EPA provided this Funding Sources Guide for Service Line Inventories. You may request technical assistance for your community through EPA's Water TA request form. Additionally, your State may have additional funding and assistance programs. For more information on assistance with identifying and replacing your lead service lines visit: https://www.epa.gov/ground-water-and-drinking-water/lead-service-lines.

Are predictive models acceptable as sources for the LCRR initial service line inventory requirement?

If approved by the state, the rule does allow water systems to use "other sources." The EPA's Guidance for Developing and Maintaining a Service Line Inventory discusses predictive modeling as a method that some water systems have found effective in identifying service line materials. Your State may have specific guidelines for predictive modeling.

Is there a maximum percentage of unknown service lines a water system can submit as part of its initial service line inventory?

No. EPA has not set a maximum percentage of unknown service lines a water system can include in its initial service line inventory. However, EPA discourages systems from submitting inventories to states with all unknowns. EPA's inventory guidance provides a strategy to prioritize unknown lines most likely

to be lead for identification. Please see frequently asked questions below related to this notification requirement.

Are all service lines, including fire suppression service lines, required to be included in the initial service line inventory?

Systems must include all service lines in their inventories, regardless of the actual or intended use. These include, for example, service lines with non-potable applications such as fire suppression or those designated for emergency. These service lines could be repurposed in the future for a potable or non-emergency use. Water systems must also include in their inventory service lines connected to vacant or abandoned buildings, even if they are unoccupied and the water service is turned off.

Lead Action Level Exceedance (ALE) Tier 1 Public Notice (PN)

What are the requirements to conduct Tier 1 Public Notice (PN) following a lead action level exceedance (ALE)?

Water systems that exceed the lead action level are required to provide public notification to persons served as soon as practical but no more than 24 hours after learning of the exceedance. EPA refers to this type of public notification as "Tier 1". Water systems must also consult with their State and provide a copy of the notice to the State and EPA within 24 hours after learning of the exceedance. See EPA's Public Notification website for more information. EPA has developed a template that water systems can use to draft Tier 1 PN for a lead ALE.

When does the 24-hour clock start for a Lead Action Level Exceedance (ALE) Tier 1 PN?

Water systems must provide public notification as soon as practical but no more than 24 hours after learning of the lead ALE.

Do water systems have to submit a certification within 10 days of completing the Tier 1 PN for a lead ALE?

Yes, water systems must submit a certification to their State within 10 days of completing the 24-hour Tier 1 PN requirements. For additional information regarding specific State guidelines and formats for submission of this certification, please contact your State. Note, this certification requirement is in addition to the requirement that water systems provide a copy of the Tier 1 notice to EPA and the head of the primacy agency as soon as practicable, but not later than 24 hours after the system learns of the lead ALE.

Is a lead action level exceedance (ALE) a violation?

No, an exceedance of the lead action level is not a violation. If the lead action level is exceeded in more than ten percent of tap water samples collected during any monitoring period (i.e., if the 90th percentile level is greater than the action level), a water system must take certain actions such as issuing Tier 1 PN, public education, optimizing corrosion control treatment, and, in some cases, replacing lead service lines.

Public Education for Known or Potential Lead Service Lines (LSLs)

What are the Public Education requirements for Known or Potential LSLs?

Water systems must provide information to all persons served at service connections with lead, galvanized requiring replacement, or lead status unknown service lines within 30 days of completion of

their initial service line inventory. This will provide awareness and education to residents about their service line material and steps they can take to reduce their exposure to lead in drinking water.

What is the delivery timeline for this Public Education for Known or Potential LSLs?

A water system must provide the initial notification within 30 days of completion of their initial service line inventory. For purposes of the initial inventory, EPA will treat the compliance date of October 16, 2024, as the start date for calculating the 30-day deadline for providing notification to persons served by a lead, galvanized requiring replacement, or lead status unknown line because this is also the deadline for systems to submit the inventory to the State. However, EPA does encourage water systems to provide these notifications earlier to educate their consumers. Water systems must also provide the notice at the initiation of service for new customers. This requirement applies beginning October 16, 2024. Water systems must repeat notification on an annual basis until the entire service connection is no longer lead, galvanized requirement replacement, or unknown.

What do water systems report to the State for this requirement?

Annually by July 1, the water system must demonstrate to the State that it delivered these service line notifications for the previous calendar year. The water system must provide a copy of the notification and information materials to the State. For additional information regarding specific State guidelines and formats for submission of this certification, please contact your State.

What are the content requirements for the Notification of Known or Potential LSLs?

The specific content requirements vary depending on whether the service line is lead, GRR, or unknown. All notifications must include an explanation of the health effects of lead, a statement that service line material is either lead, galvanized requiring replacement, or unknown, and steps individuals can take to reduce lead exposure in drinking water. For a confirmed lead or galvanized requiring replacement, the notice must also include information on opportunities to replace the service line. For an unknown service line, the notice must include information on opportunities to verify the material of the service line. See 40 C.F.R. section 141.84(e)(3) for the complete list of specific requirements.

What resources are available to assist systems with these notifications?

EPA is developing templates that water systems may use for the notifications of a known or potential LSL. EPA expects to have these templates available in spring 2024 and plans to post them on EPA's website at https://www.epa.gov/dwreginfo/lead-and-copper-rule-implementation-tools.

FACT SHEET

PFAS National Primary Drinking Water Regulation

Introduction

Safe drinking water is fundamental to healthy people and thriving communities. President Biden believes that all people in the United States should have access to clean, safe drinking water. Since the beginning of the Biden-Harris Administration, EPA has been delivering on the promise to protect communities from the harmful effects of toxic substances, including carcinogens. PFAS are a series of man-made chemical compounds that persist in the environment for long periods of time. They are often called "forever chemicals." For decades PFAS chemicals have been used in industry and consumer products such as nonstick cookware, waterproof clothing, and stain resistant furniture. These chemicals have been important for certain industries and uses. And the latest science shows that these chemicals are harmful to our health.

PFAS exposure over a long period of time can cause cancer and other serious illnesses that decrease quality of life or result in death. PFAS exposure during critical life stages such as pregnancy or early childhood can also result in adverse health impacts. EPA's responsibility through the Safe Drinking Water Act is to protect people's drinking water, and the Biden-Harris Administration is taking action to protect public health by establishing nationwide, legally enforceable drinking water limits for several well-researched PFAS chemicals and reduce PFAS exposure for approximately 100 million Americans served by public drinking water systems.

The Rule

As the lead federal agency responsible for protecting America's drinking water, EPA is using the best available science on PFAS to set national standards. PFAS can often be found together in water and in varying combinations as mixtures. Decades of research shows mixtures of different chemicals can have additive health effects, even if the individual chemicals are each present at lower levels.

In this final rule, EPA is setting limits for five individual PFAS: PFOA, PFOS, PFNA, PFHxS, and HFPO-DA (known as GenX Chemicals). And EPA is also setting a Hazard Index level for two or more of four PFAS as a mixture: PFNA, PFHxS, HFPO-DA, and PFBS.

Chemical	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)
PFOA	0	4.0 ppt
PFOS	0	4.0 ppt
PFNA	10 ppt	10 ppt
PFHxS	10 ppt	10 ppt
HFPO-DA (GenX chemicals)	10 ppt	10 ppt
Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS	Hazard Index of 1	Hazard Index of 1
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety and are non-enforceable public health goals.		

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
ppt: parts per trillion
Hazard Index (HI): The Hazard Index is a long-established approach that EPA regularly uses to understand health risk from a chemical mixture (i.e., exposure to multiple chemicals). The HI is made up of a sum of fractions. Each fraction compares the level of each PFAS measured in the water to the health-based water concentration.

This new rule will significantly reduce the level of PFAS in drinking water across the United States. Many states have worked to monitor for and reduce PFAS exposure in drinking water through state-specific regulations. This rule builds on these efforts by incorporating the latest science and establishing a nationwide, long-term health-protective level for these specific PFAS in drinking water. Communities and states will need to determine whether PFAS is in their drinking water and take actions such as notifying consumers and reducing the levels of PFAS, as needed.

Water systems must take action to reduce the levels of these PFAS in drinking water if the level of PFAS in their drinking water exceeds regulatory standards. Regulated public water systems have three years to complete their initial monitoring for these chemicals. Systems must include their results in their Annual Water Quality reports to customers. Systems that detect PFAS above the new standards will have five years to implement solutions that reduce PFAS in their drinking water. Water systems must also notify the public if levels of regulated PFAS exceed these new standards.

Impacts and Costs of the Rule

People will live longer, healthier lives because of this action, and the benefits justify the costs. Once implemented, these limits will reduce tens of thousands of PFAS-attributable illnesses or deaths. EPA estimates that once implemented, this regulation will reduce PFAS exposure for approximately 100 million Americans served by public drinking water systems. EPA considered all available information and analyses for costs and benefits, quantifiable and non-quantifiable, of this rule and determined that the benefits justify the costs.

Fewer people will get cancer or liver disease, pregnant women will have reduced risks, and more and children and infants will be stronger and grow healthier. EPA calculated measurable health benefits based on fewer cancers, lower incidents of heart attacks and strokes, and reduced birth complications. These benefits are estimated to be approximately $1.5 billion per year, and include avoided costs of medical bills, income lost to illness, and death. Additionally, EPA could not quantify all the health benefits, including developmental, cardiovascular, liver, immune, endocrine, metabolic, reproductive, musculoskeletal, and carcinogenic effects, and therefore the benefit estimates are likely greater than $1.5 billion.

Compliance with this rule is estimated to cost approximately $1.5 billion annually. The Biden-Harris Administration has dedicated $9 billion through the Bipartisan Infrastructure Law to help communities impacted by PFAS pollution in drinking water. In addition, another $12 billion in Bipartisan Infrastructure Law funding is available to communities to make general drinking water improvements, including addressing PFAS chemicals. Estimated costs include water system monitoring, communicating with customers, and – if necessary – installing treatment technologies.

Implementation and Funding

The rule is achievable and implementable. Drinking water utilities will be able to implement these new requirements as control technologies exist and are in use today. Water treatment technologies exist to remove PFAS from drinking water including granular activated carbon, reverse osmosis, and ion exchange systems. EPA's

final rule does not dictate how water systems remove these contaminants. The rule is flexible, allowing systems to determine the best solutions for their community. Public water systems can choose from multiple proven treatment options. In some cases, systems can close contaminated wells or obtain a new uncontaminated source of drinking water.

There is unprecedented funding for drinking water systems impacted by PFAS and other emerging contaminants to provide safe water to communities. We know that PFAS pollution can have a disproportionate impact on small, disadvantaged, and rural communities, and there is federal funding available specifically for these water systems. With today's announcement of the rule, EPA is also announcing nearly $1 billion for states and territories, through the Emerging Contaminants in Small or Disadvantaged Communities Grant Program, which can be used for initial testing and treatment at both public water systems and to help owners of private wells address PFAS contamination. The nearly $1 billion announced today is part of the dedicated $9 billion of Bipartisan Infrastructure Law (BIL) funding for communities with drinking water impacted by PFAS and other emerging contaminants. An additional $12 billion in Bipartisan Infrastructure Law funding is available to communities to make general drinking water improvements, including addressing PFAS pollution. This funding is available through EPA programs that are part of President Biden's Justice40 Initiative, which set the goal that 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities that are marginalized by underinvestment and overburdened by pollution.

EPA's free Water Technical Assistance program (WaterTA) is ensuring that disadvantaged communities can access federal funding. Too many communities across America face challenges providing safe drinking water services to their residents, and WaterTA supports communities to identify water challenges; develop plans; build technical, managerial, and financial capacity; and develop application materials to access water infrastructure funding. EPA collaborates with state, Tribes, territories, community partners, and other key stakeholders to implement WaterTA efforts and the end result is more communities with applications for federal funding, quality water infrastructure, and reliable water services. Learn more here.

Additional Resources

Learn more about water infrastructure funding opportunities by visiting EPA's water infrastructure page.

If you are concerned about PFAS in drinking water, there are key actions you can take. People who are concerned about PFAS in their drinking water should first contact their drinking water utility to find out more about their drinking water, including what contaminants may be present, if the utility is monitoring for PFAS, what the levels are, and to see whether any actions are being taken.

If you remain concerned after talking to your utility, then consider using or installing in-home water treatment (e.g., filters) that is certified to lower the levels of PFAS in your water and/or contact your health care provider as well as your state or local health department. You can find more information about water filters that help reduce PFAS here. If you get your water from a home drinking water well, then EPA recommends you conduct regular testing. If PFAS are found, you can take steps to lower the levels of PFAS. For more visit: EPA's website here.

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Proposed Fiscal Year 2025 Budget and Rates Workshop	**AGENDA DATE:** May 16, 2024
	ACTION: Informational
STAFF CONTACT/PREPARER: Quin Lunsford, Director of Finance	**ATTACHMENTS:** Yes

BACKGROUND: The proposed fiscal year 2025 budget was provided in April and available on the Authority's website for Board consideration.

The Board meeting today provides an opportunity to review the Fiscal Year 2025 budget and rates in detail and highlight key strategic initiatives for the upcoming fiscal year. We will also review fiscal year 2024 projections. The presentation has been designed in a workshop format and provides an opportunity for discussion.

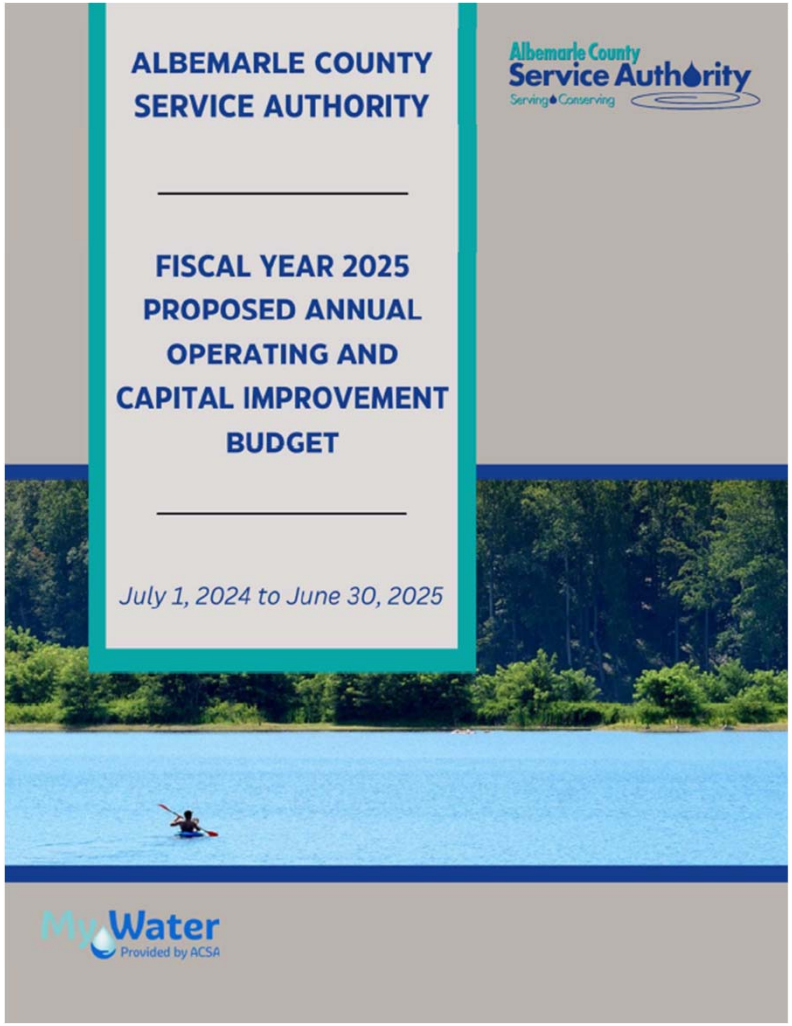
The budget is scheduled to be considered for adoption at the June 20th Board meeting, following a Public Hearing.

ATTACHMENTS:

1. Proposed FY 2025 Budget – Presentation Slides

Fiscal Year 2025 Budget & Rate Workshop

May 16, 2024



Budget Workshop Agenda

- ACSA Overview
- FY 2024 Update and Forecasts
- Strategic Plan and FY 2025 Budget
- Water and Sewer Rate Analysis
- FY 2025 Budget Highlights/Summary
- Proposed Rate Review
- Value of Water/Customer Bill Comparisons
- Departmental Budget Proposals
- Capital Improvement Program Overview
- Next Steps

Clean, Safe, Reliable

Vision:

- Serve and conserve today, sustain for tomorrow, and protect our resources forever.

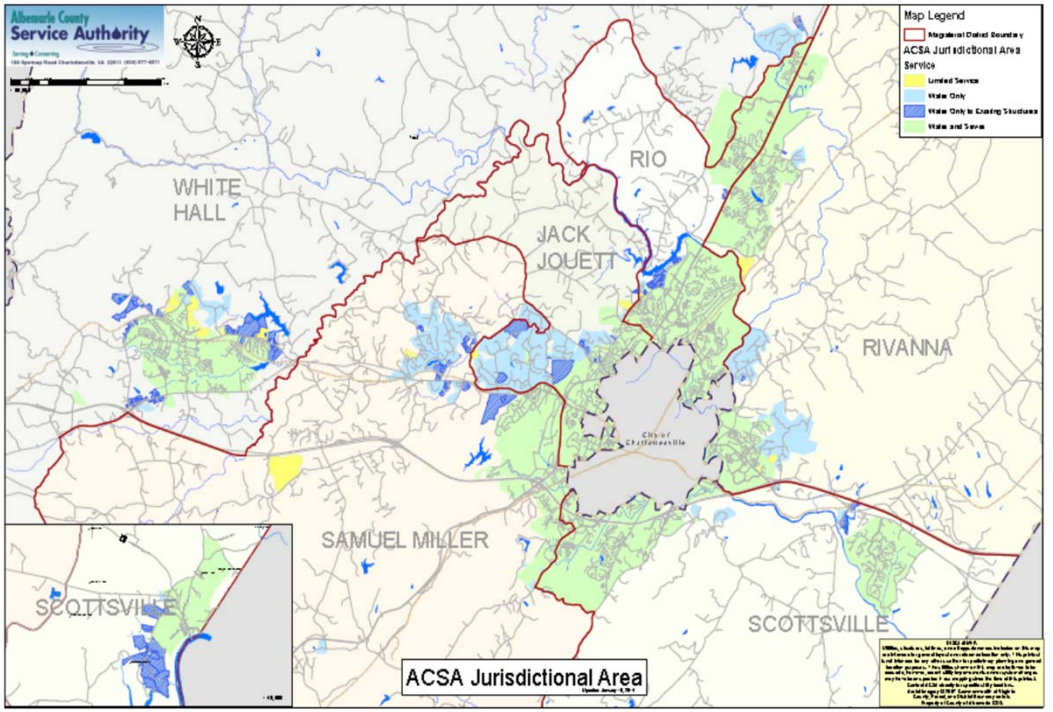
Mission:

- With pride and dedication we serve our customers by providing clean, safe water, exemplary wastewater services, and fire protection infrastructure. Together with our community partners, we maintain and improve our utility system in a timely, cooperative, and financially responsible manner.

MyWater Provided by ACSA

Albemarle County Service Authority (ACSA)

- Founded in 1964
- Serving 86,600+ customers
- 22,500+ water accounts and growing
- 84 Dedicated Employees
- 374 Miles of Water Lines
- 315 Miles of Sanitary Sewer Lines
- 18 Pump Stations
- 7 Water Storage Tanks
- 3,146 Fire Hydrants



Fiscal Year 2024 Update

- **Operating Revenues (adjusted for seasonal variations through April 2024)**
  - Water Revenues exceed budgeted expectations by 3.9% or $657,000
  - Sewer Revenues exceed budgeted expectations by 3.6% or $491,000
- **Operating Expenses (through April 2024)**
  - Water Expenses are below budgeted expectations by 0.4% or $55,000
  - Sewer Expenses are below budgeted expectations by 2.7% or $264,000
  - Departmental Expenses below budgeted expectations by 12.7% or $1,405,000

Forecasts for the Remainder of Fiscal Year 2024

- Operating Revenue Projections:
  - Water Revenues:
    - Expected to exceed budgeted amounts by approximately 3.2% or $657,000
  - Sewer Revenues:
    - Expected to exceed budgeted amounts by approximately 2.9% or $491,000

The ACSA 2023 – 2027 Strategic Plan and Budget Process

- Four Strategic Themes:
  - Data Optimization
  - Business Resilience
  - Customer Experience
  - Employee Experience
- Key initiatives that support these themes are outlined in the FY 25 budget

Water and Sewer Rate Analysis

Rate Update and Analysis Findings

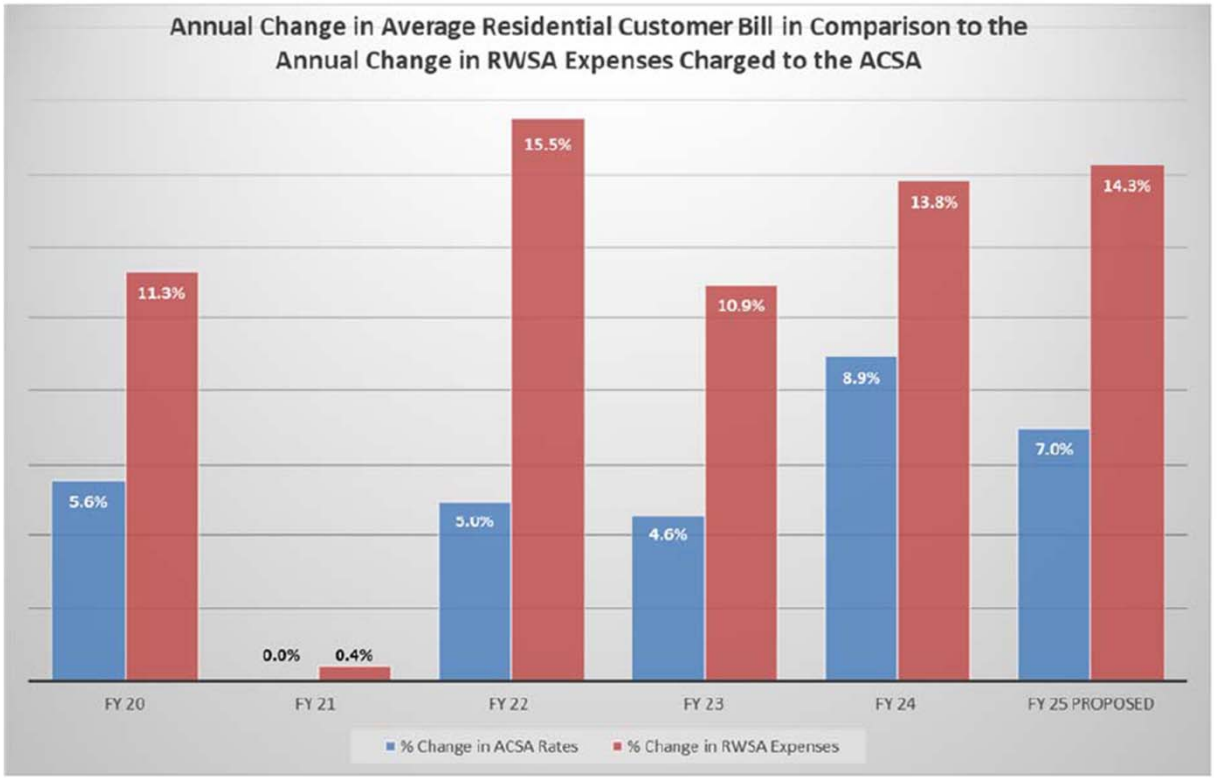
- The ACSA's most significant expenses are the wholesale water and sewer treatment services provided by RWSA
  - Nearly 63% of operating budget
  - Expected average increases year over year for FY 25 - FY 29:
    - Water/Sewer – 13% year-over-year

Rate Update and Analysis Recommendations

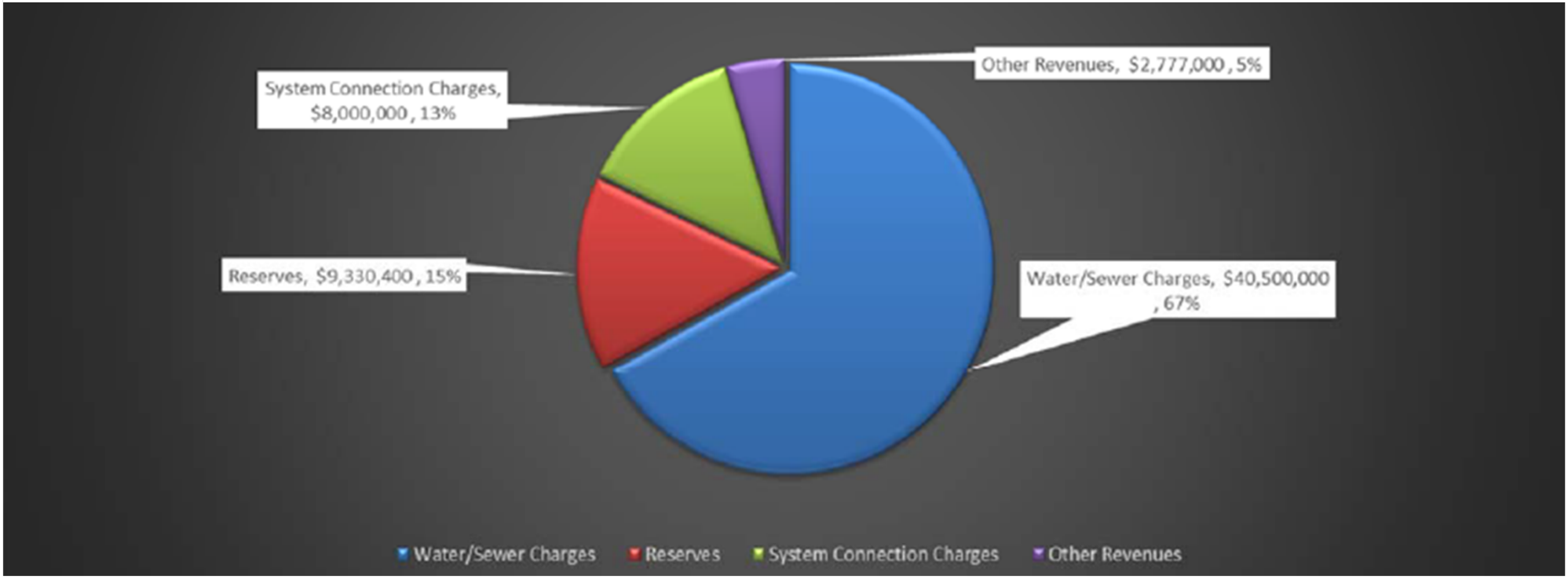
- Recommendation to increase water/sewer charges 7% for customers in FY 2025
  - Follows a 8.9% increase in FY 2024, a 4.6% increase in FY 2023 and a 5% in customer rates in FY 2022
- Recommendation to maintain current system development/capacity charges FY 2025
  - Last increase was approved in FY 2024.
- Use of reserves to smooth customer rate increases over time
  - Budget includes $6.5M in rate stabilization reserves and $2.8M in growth reserves in FY 2025

FY 2025 Budget Development

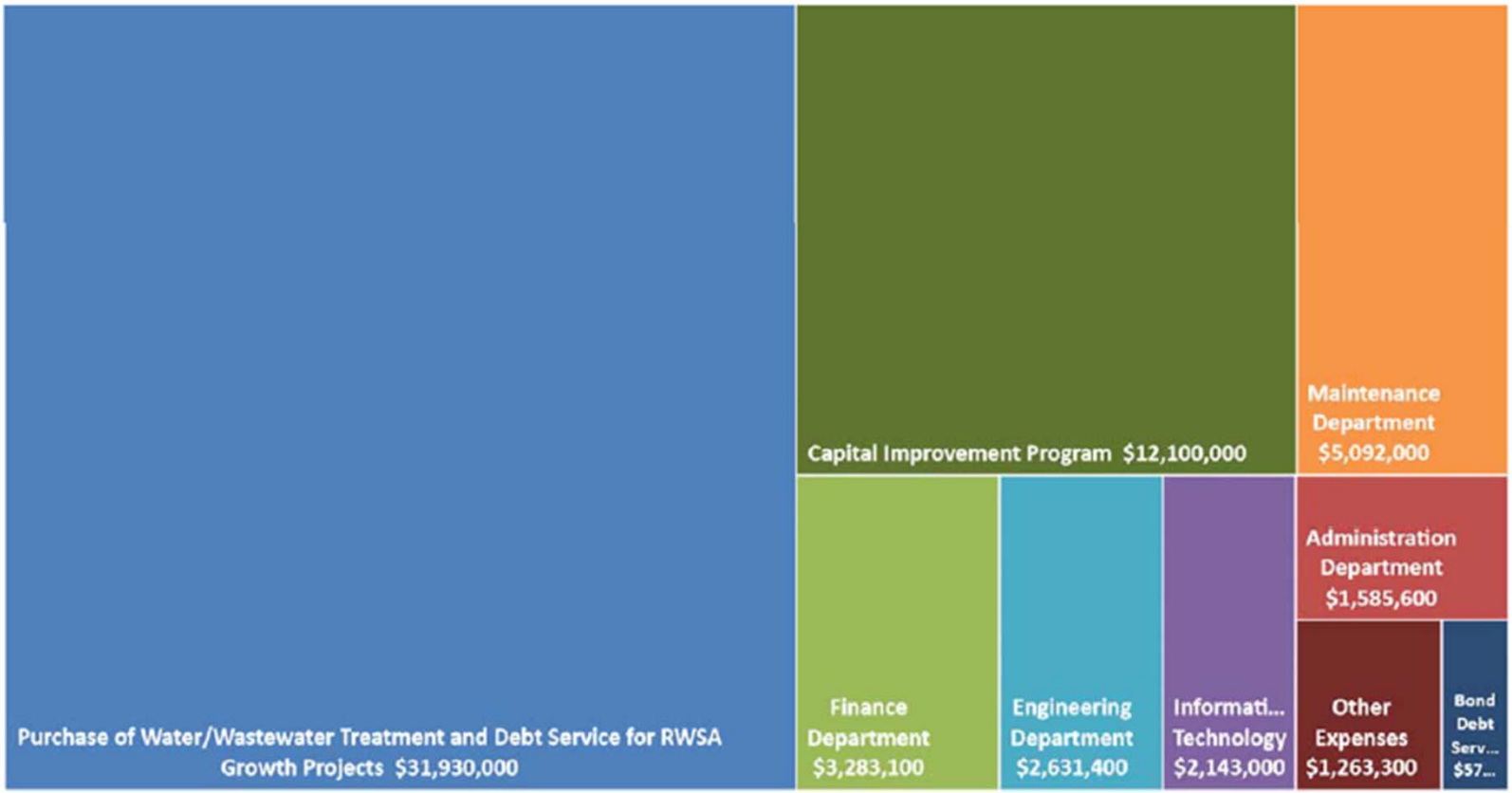
- Increase of $4.52 per month for average single-family customer
- Anticipated increase in RWSA treatment/debt service costs 14.3%



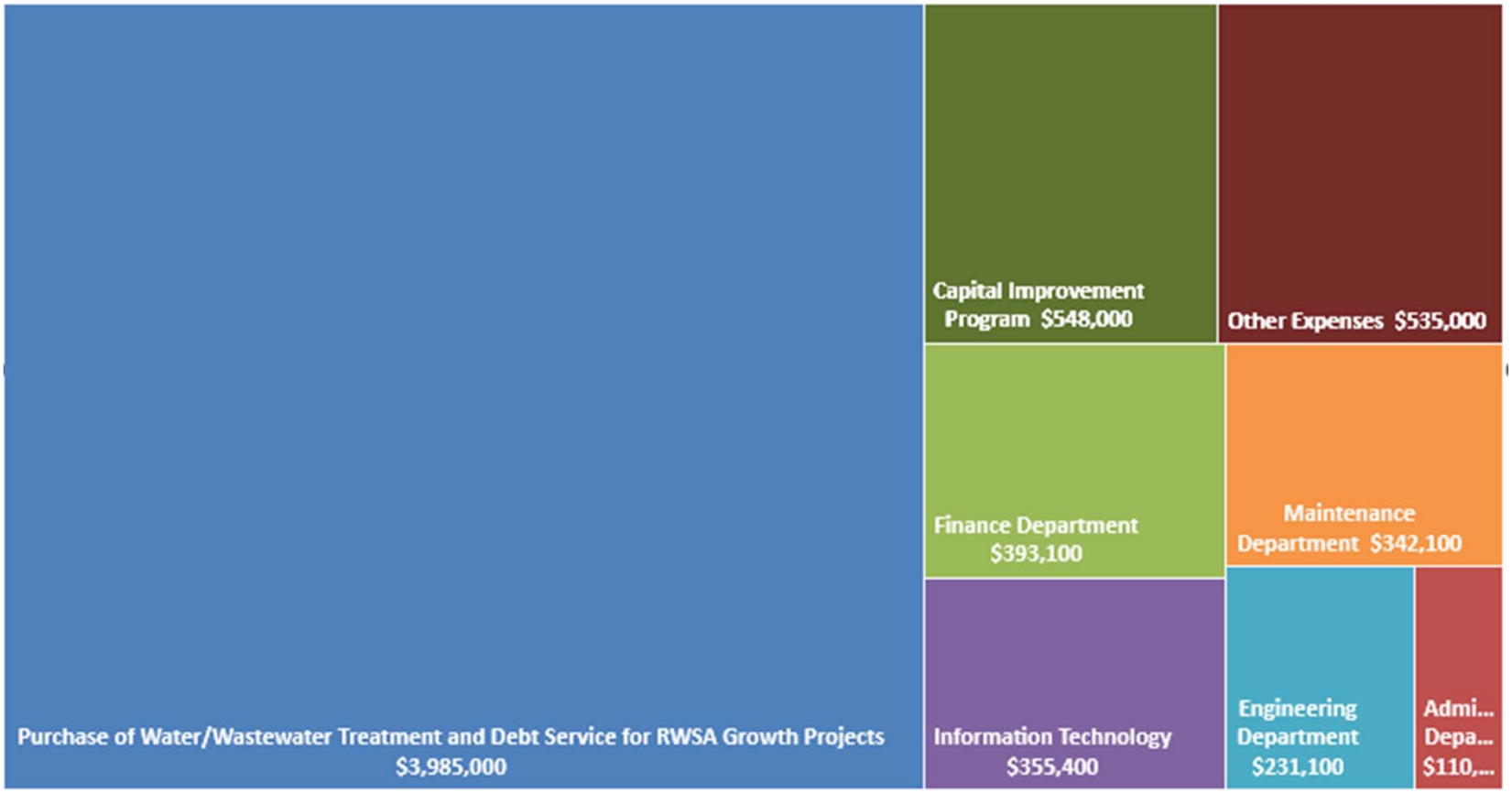
Budgeted Revenues and Use of Reserves



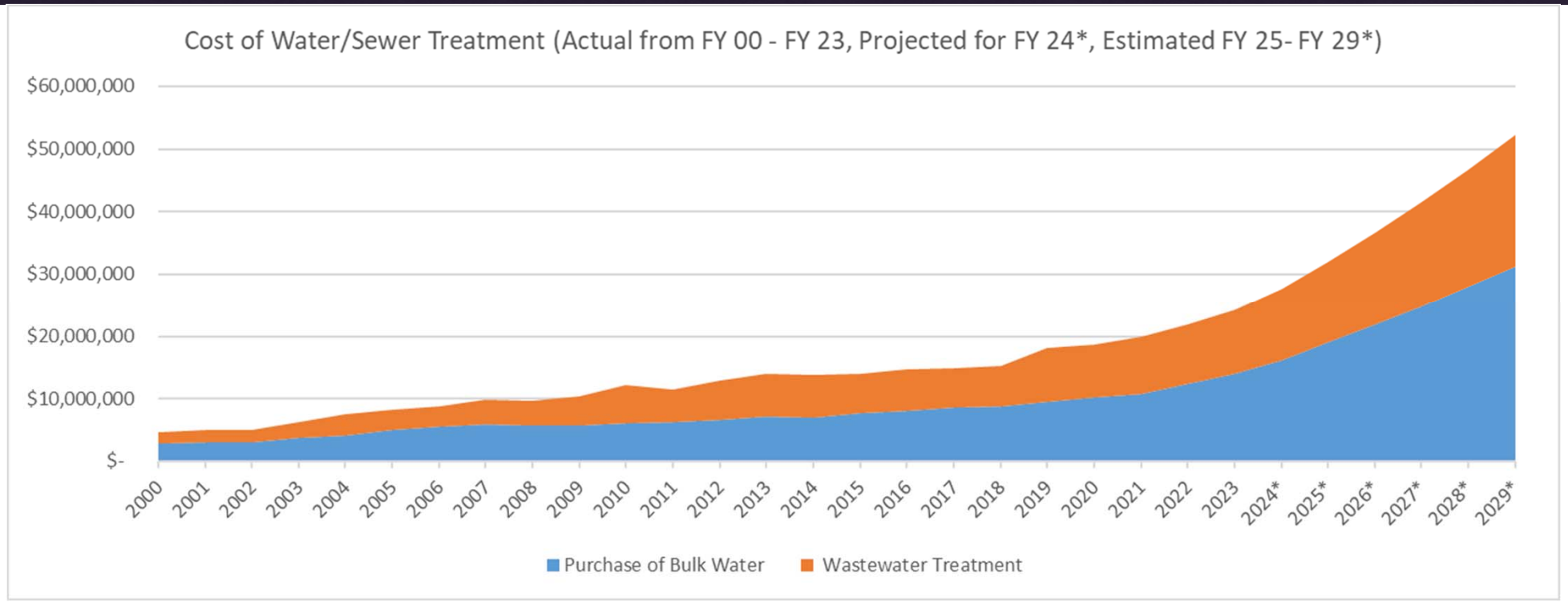
Budgeted Expenses and Capital Costs



Dollar Increases by Cost/Expense Classification



Actual and Projected Costs of Water/Wastewater Treatment



Projected Costs of Water/Wastewater Treatment FY's 2025-2029

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029
RWSA Estimates	$30,649,200	$35,065,015	$39,624,480	$44,568,315	$49,822,862
% Inc. to Prior Year	13.3%	14.4%	13.0%	12.5%	11.8%
$ Inc. over Prior Year	$3,596,300	$4,415,815	$4,559,465	$4,943,835	$5,254,547

Proposed Water and Sewer Rates FY 2025

	FY 2024	FY 2025
Service Charge	$ 10.40	$ 11.13
Volume Charge - Single-Family Residential (per 1,000 gallons)		
Level 1 (0-3,000 gallons)	$ 5.56	$ 5.95
Level 2 (3,001-6,000 gallons)	$ 11.15	$ 11.93
Level 3 (6,001-9,000 gallons)	$ 16.71	$ 17.88
Level 4 (over 9,000 gallons)	$ 22.30	$ 23.86
Multi-Family/Non-Residential	$ 11.15	$ 11.93
Sewer/All Users (per 1,000 gallons)	$ 11.06	$ 11.83

Additional Recommendations for Changes to Ancillary Charges

- To more closely recover actual costs of services, recommendations to update charges for:
  - Construction Inspection Fees
  - Other Miscellaneous charges
- To align with actual cost of services provided

THE ALBEMARLE COUNTY SERVICE AUTHORITY
PUBLIC HEARING ON PROPOSED BUDGET AND
WATER/WASTEWATER RATE CHANGES FOR FY 2025

The Albemarle County Service Authority will hold a public hearing on Thursday, June 20, 2024, at 9:00 a.m. at the ACSA Office at 168 Spotnap Road, Charlottesville, Virginia 22911 and via Zoom, please visit www.serviceauthority.org for additional information. The public hearing will address the Proposed FY 2025 Budget and the following changes to the water and wastewater rates and other charges/fees:

Water	FY 2024	Proposed FY 2025
Service Charge by Meter Size		
3/4"	$ 10.40	$ 11.13
1"	$ 25.99	$ 27.81
1 ½"	$ 51.98	$ 55.62
2"	$ 83.16	$ 88.98
3"	$ 166.32	$ 177.96
4"	$ 259.88	$ 278.07
6"	$ 519.75	$ 556.13
Volume Charge - Single-Family Residential (per 1,000 gallons)		
Level 1 (0-3,000 gallons)	$ 5.56	$ 5.95
Level 2 (3,001-6,000 gallons)	$ 11.15	$ 11.93
Level 3 (6,001-9,000 gallons)	$ 16.71	$ 17.88
Level 4 (over 9,000 gallons)	$ 22.30	$ 23.86
Multi-Family/Non-Residential	$ 11.15	$ 11.93
Wastewater		
Sewer/All Users (per 1,000 gallons)	$ 11.06	$ 11.83
Miscellaneous Charges		
Irrigation System Plan Review and Meter Sizing	$ 33.00	$ 35.00
Construction Inspection Fees:		
Water and/or Sewer lines (Minimum $500/project)	$ 1.30/linear foot	$ 1.75/linear foot

All other charges remain unchanged.

Further information may be obtained from the ACSA website at www.serviceauthority.org or the office of the Executive Director, or by calling the ACSA office at (434) 977-4511 ext.3.

Gary B. O'Connell
Executive Director

Proposed Water and Sewer Rates FY 2025

- The proposed increase in customer water and sewer rates is attributable to:
  - RWSA treatment and capital cost increases
    - Water: +17.5% increase compared to prior FY or $2.84M
    - Sewer: +9.8% increase compared to prior FY or $1.15M
  - Total departmental operating budget increase of 10.8% or $1.43M
    - Merit/market adjustments to remain competitive in the market-place: $460,000
    - One new proposed position (Construction Inspector): $85,000
    - Employee benefits, operating supplies, R&M, software subscriptions, utilities, etc. : $885,000

Use of Reserves and Projections

- The proposed budget includes:
  - $6.5M from rate stabilization reserves, to fund “non-growth” ACSA CIP
  - $2.8M from “growth reserves” to fund ACSA “growth” CIP and RWSA debt service for growth related projects
  - Use of reserves proposed to mitigate the rate increase required by customers in the upcoming year
  - Sound financial management and growing system provides the opportunity to more smoothly increase customer rates over time

Growth Reserves – Calculations for FY 25

Budgeted FY 2025 System Connection Charge Revenue	
ACSA System Development Charge Revenue	$ 2,889,000
RWSA Capacity Charge Revenue	5,111,000
Total System Connection Charge Revenue Budgeted for FY 25	$ 8,000,000

Growth Reserves – Calculations for FY 25

ACSA System Dev. Charges	FY 25
Calculated ACSA Growth Related CIP FY 25	$ 3,855,000
ACSA System Development Charge Revenue	(2,889,000)
Expected use of ACSA Growth Reserves FY 25	**966,000**

RWSA Capacity Charges	FY 25
Calculated RWSA Growth Related Debt Service FY 25	$ 6,926,000
RWSA Growth Related Debt Service FY 25	(5,111,000)
Expected use of RWSA Growth Reserves FY 25	**1,815,000**

Growth Reserves – Accumulation and Use RWSA Capacity Charges

RWSA Capacity Charge Reserves	FY 24 Budget Scenario
Cap. Chg. Reserve 7/1/23	$ 18,807,518
Budgeted Cap. Chg. Revenue	5,377,174
Budgeted Growth-Related DS	(6,264,000)
Cap. Chg. Reserve 6/30/24	$ 17,920,692
Budgeted Use of Growth Reserve FY 23	**$ 886,826**

RWSA Capacity Charge Reserves	FY 24 Actual Projections
Cap. Chg. Reserve 7/1/23	$ 18,807,518
Est. Cap. Chg. Revenue through 6/30/24	5,204,046
Growth-Related DS	(6,264,000)
Cap. Chg. Reserve 6/30/24	$ 17,747,564
Estimated Use of Growth Reserve FY 24	**$ 1,059,954**

Growth Reserves – Accumulation and Use ACSA System Development Charges

ACSA Sys. Dev. Reserves	FY 24 Budget Scenario
Sys. Dev. Reserve 7/1/23	$ 17,292,359
Budgeted Sys. Dev. Revenue	2,622,826
Budgeted Growth-CIP FY 24	(6,372,500)
Sys. Dev. Reserve 6/30/24	$ 13,542,685
Budgeted Use of Growth Reserve FY 24	**$ 3,749,674**

ACSA Sys. Dev. Reserves	FY 24 Actual Projections
Sys. Dev. Reserve 7/1/23	$ 17,292,359
Est. Sys. Dev. Revenue through 6/30/24	2,771,088
ACSA Growth-Related CIP Costs 4/30/24	(2,699,220)
Sys. Dev. Reserve 6/30/24	$ 17,364,227
Addition to Growth Reserve FY 24	**$ 71,868**

Sample Monthly Combined Water and Sewer Bill

Sample Monthly Combined (Water and Sewer) Bills

Combined Water and Sewer	Meter Size	Monthly Usage (gallons)	Current Bill	Recommended FY 2025 Bill	Monthly $ Change	Daily $ Change
Single-Family						
Minimal User	3/4"	1,200	$ 30.34	$ 32.47	$ 2.13	$ 0.07
Small User	3/4"	2,500	$ 51.95	$ 55.58	$ 3.63	$ 0.12
Average User	3/4"	3,200	$ 64.70	$ 69.22	$ 4.52	$ 0.15
Large User	3/4"	6,200	$ 132.44	$ 141.69	$ 9.25	$ 0.31
Excessive User	3/4"	7,700	$ 174.10	$ 186.26	$ 12.16	$ 0.41
Multi-Family/Non-Residential						
Multi-Family	1"	33,700	$ 774.47	$ 828.52	$ 54.05	$ 1.80
Com. (Offices)	1"	6,300	$ 165.91	$ 177.50	$ 11.59	$ 0.39
Com. (Other)	3/4"	4,700	$ 114.79	$ 122.80	$ 8.01	$ 0.27
Industrial	1 ½"	16,500	$ 418.45	$ 447.66	$ 29.21	$ 0.97
Institutional	¾"	13,000	$ 299.13	$ 320.01	$ 20.88	$ 0.70

Value of Water

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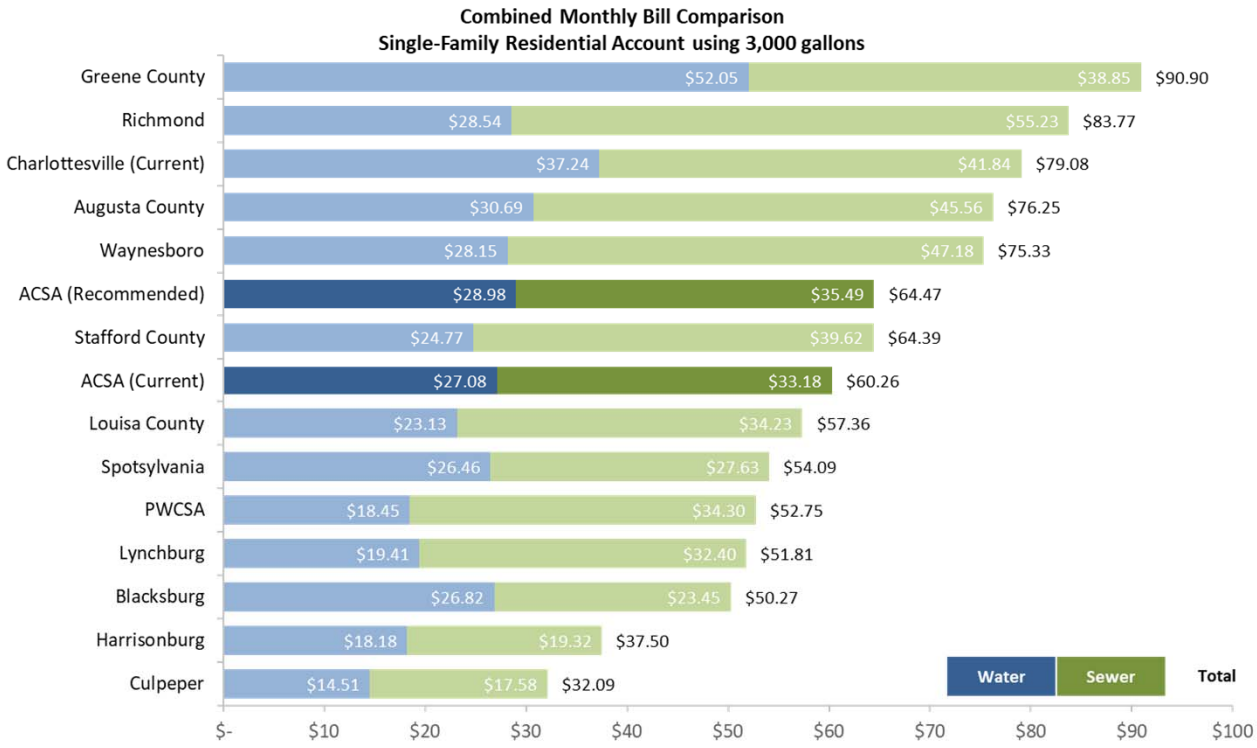
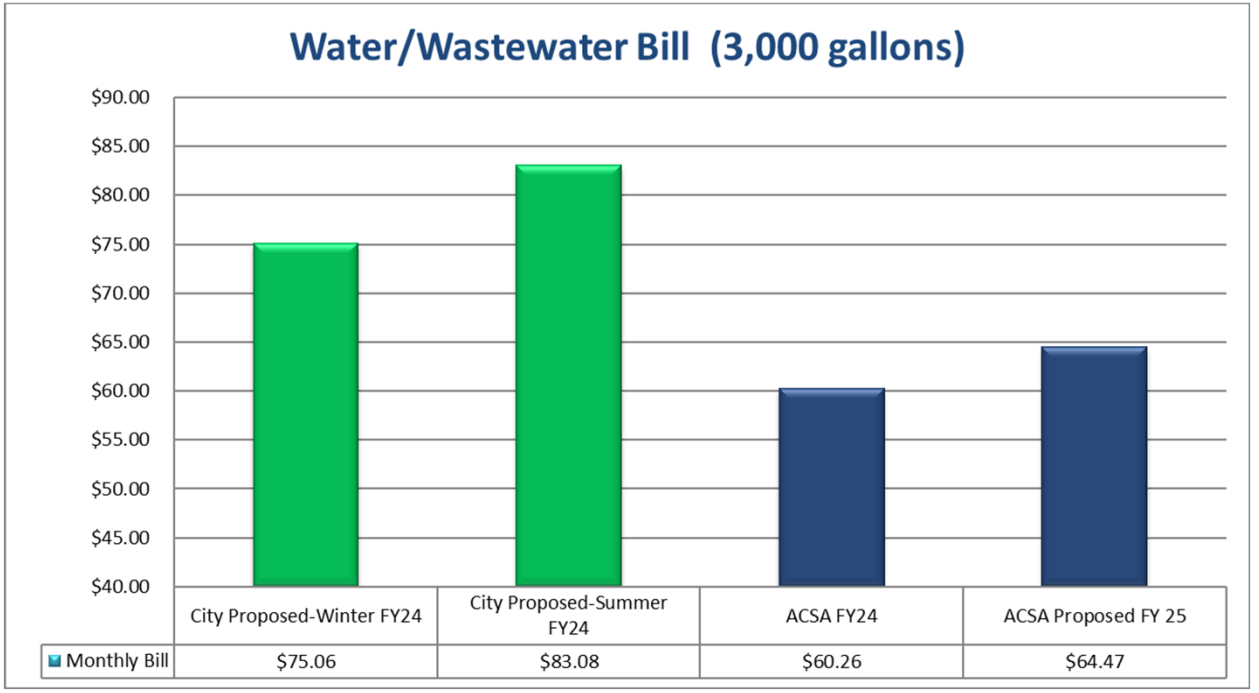
ACSA Monthly Bill Comparison to Comparable Utilities

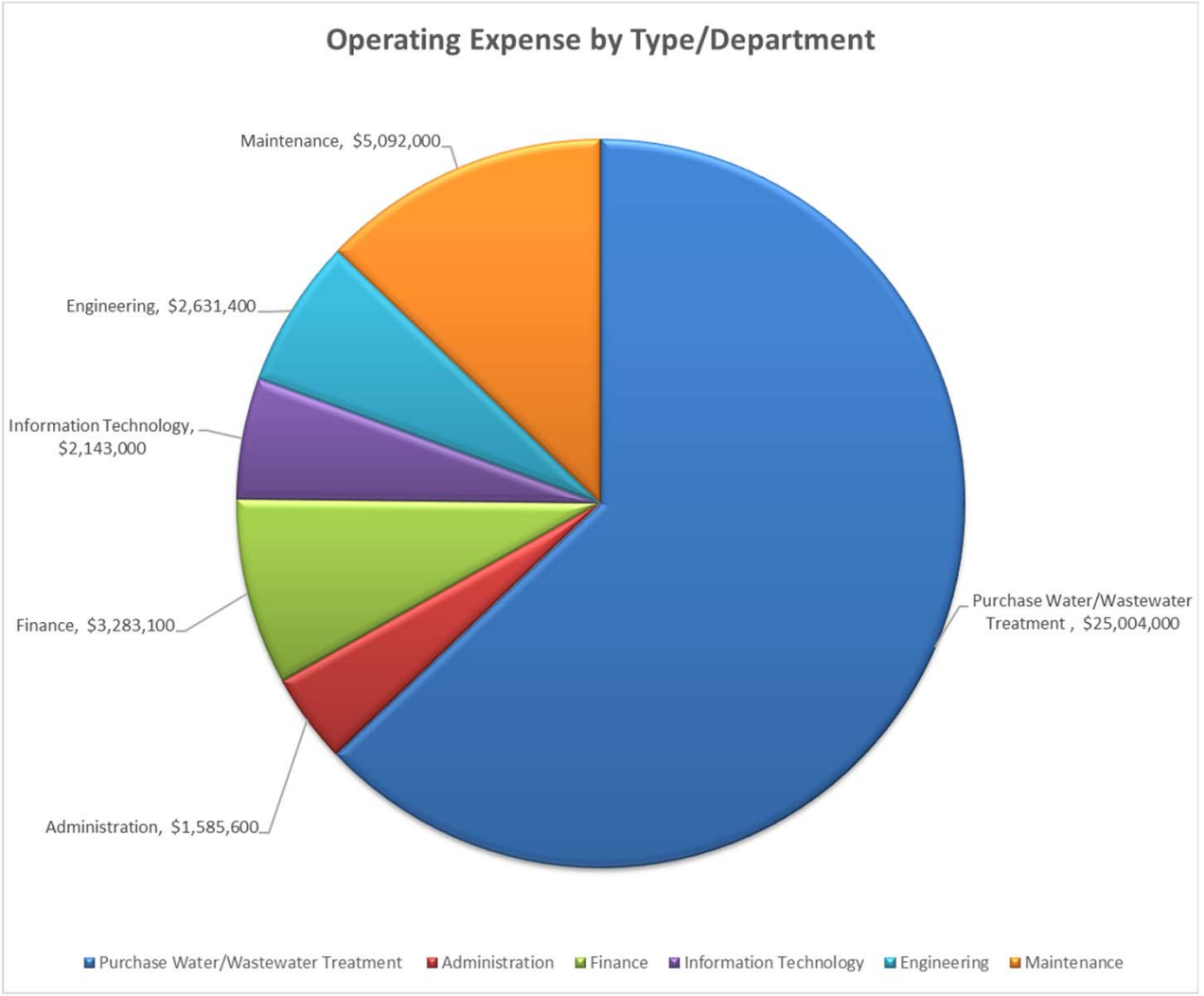


ACSA Monthly Bill Comparison to Comparable Utilities



Assuming the details noted above, an ACSA customer's bill at the FY 24 proposed rates, would be 14%-22% less than a comparable bill from the City (FY 24 rates, additionally the City charges a 10% utility tax in addition to the monthly bill on consumption (not reflected in the City's bill above).

Operating Budget



Administration

- Key initiatives for FY 2025:
  - Conduct a classification and compensation study (2023-2027 Strategic Plan)
  - Quarterly leadership development training program for supervisors (2023-2027 Strategic Plan)
  - Expand customer communications through a variety of media, customer education and outreach: (2023-2027 Strategic Plan)
    - Comprehensive customer education program on the value and quality of water, investment in major regional water protects and coordination with our regional partners (RWSA and City of Charlottesville)
  - Continue to actively promote water conservation and environmental sustainability (2023-2027 Strategic Plan)
  - Continue to provide safety training and safety initiatives for ACSA employees (2023-2027 Strategic Plan)
  - Continue to enhance the Customer Experience (CX) (2023-2027 Strategic Plan)
  - Support the Board of Directors in policy making

Engineering

- Key initiatives for FY 2025:
  - Scheduled replacement and repair of aging/undersized infrastructure (2023-2027 Strategic Plan)
  - Begin construction of the Avon Operations Center (2023-2027 Strategic Plan)
  - Customer Information System (CIS) development, including billing and phone system replacements and website redesign (2023-2027 Strategic Plan)
  - Administration and oversight of the Capital Improvement Program
  - Purchase of ACSA's second Electric Vehicle (2023-2027 Strategic Plan)
  - Additional Construction Inspector position to handle increased CIP workloads and succession planning

Information Technology

- Key initiatives for FY 2025:
  - Continue to support all ACSA staff and the various project implementations
  - Continue to strengthen data security and monitoring (2023-2027 Strategic Plan)
  - Update of our 5-year Vulnerability Risk Assessment
  - Scheduled replacement and upgrade of:
    - Servers
    - PCs/field tablets
    - Mobile phones
    - Firewall (2023-2027 Strategic Plan)
  - Purchase of an electric utility vehicle (2023-2027 Strategic Plan)
  - A comprehensive assessment of our SCADA system infrastructure (2023-2027 Strategic Plan)
  - Purchase an enterprise Document Management System (2023-2027 Strategic Plan)
  - Customer Information System (CIS) development(2023-2027 Strategic Plan)

Maintenance

- Key initiatives for FY 2025:
  - Promote optimization of resources through the development of a resource use plan for the Avon Operations Center (2023-2027 Strategic Plan)
  - Increased emphasis on training and education programs (2023-2027 Strategic Plan)
  - Use of Operational Insights within CityWorks for preventative maintenance planning (2023-2027 Strategic Plan)
  - Continued focus on saddle replacements throughout the service area (2023-2027 Strategic Plan)
  - Vulnerability (Risk) Assessment 5-Year Update (Federally required CY 25)
  - Promotion of customer engagement opportunities by use of social media tools for maintenance activity updates (2023-2027 Strategic Plan)

Finance

- Key initiatives for FY 2025:
  - Training directed toward succession planning and improving workforce skills (2023-2027 Strategic Plan)
  - Focused training for staff (AMI, ERP, and CMMS) (2023-2027 Strategic Plan)
  - Customer Information System (CIS) development, including billing and phone system replacements and website redesign (2023-2027 Strategic Plan)
  - Implementation of the customer experience vision statement and analysis of customer engagement opportunities (2023-2027 Strategic Plan)
  - Review of business continuity from an operational and financial perspective (2023-2027 Strategic Plan)

Planned Capital Equipment Purchases

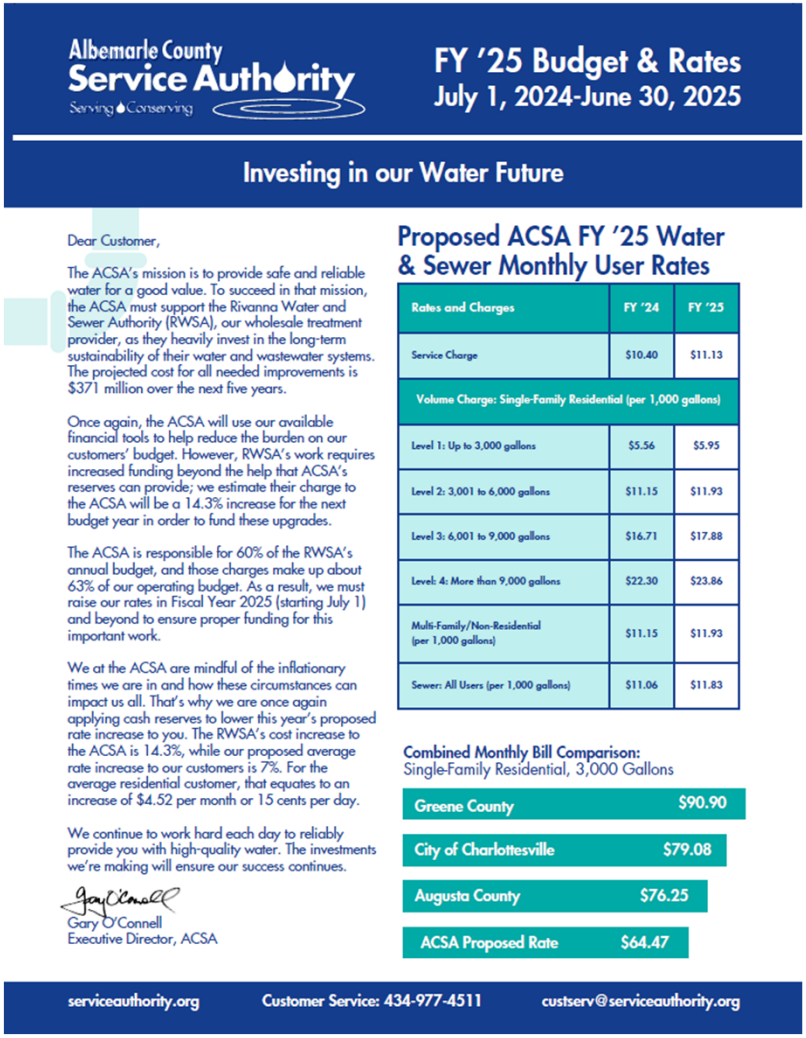
- Fleet Vehicles
  - Two electric vehicles to support strategic environmental initiatives (2023-2027 Strategic Plan)
  - Two IC vehicles to support construction inspector group and maintenance
- CCTV Van Replacement
- Pipe locator
- Planned replacement/purchase of:
  - Four servers
  - Twelve computers/thirteen iPads field tablets
  - SCADA PLCs
  - Security camera replacement
  - 48 Port server rack switches
- Office Furniture/Equipment for proposed position

Capital Improvement Program (CIP) Proposed FY 2025

Project Type	Proposed Cost
Water Projects	$ 7,760,000
Wastewater Projects	1,230,000
Non-Utility/Facility Projects	3,110,000
Total	$ 12,100,000

Budget Next Steps

- May 2024
  - Budget insert in customer bills
- June 20, 2024
  - Public Hearing
  - 2nd Budget Workshop
  - Budget Adoption
  - Rate Adoption



Albemarle County Service Authority
Serving & Conserving

FY '25 Budget & Rates
July 1, 2024-June 30, 2025

Investing in our Water Future

Dear Customer,

The ACSA's mission is to provide safe and reliable water for a good value. To succeed in that mission, the ACSA must support the Rivanna Water and Sewer Authority (RWSA), our wholesale treatment provider, as they heavily invest in the long-term sustainability of their water and wastewater systems. The projected cost for all needed improvements is $371 million over the next five years.

Once again, the ACSA will use our available financial tools to help reduce the burden on our customers' budget. However, RWSA's work requires increased funding beyond the help that ACSA's reserves can provide; we estimate their charge to the ACSA will be a 14.3% increase for the next budget year in order to fund these upgrades.

The ACSA is responsible for 60% of the RWSA's annual budget, and those charges make up about 63% of our operating budget. As a result, we must raise our rates in Fiscal Year 2025 (starting July 1) and beyond to ensure proper funding for this important work.

We at the ACSA are mindful of the inflationary times we are in and how these circumstances can impact us all. That's why we are once again applying cash reserves to lower this year's proposed rate increase to you. The RWSA's cost increase to the ACSA is 14.3%, while our proposed average rate increase to our customers is 7%. For the average residential customer, that equates to an increase of $4.52 per month or 15 cents per day.

We continue to work hard each day to reliably provide you with high-quality water. The investments we're making will ensure our success continues.

Gary O'Connell
Executive Director, ACSA

Proposed ACSA FY '25 Water & Sewer Monthly User Rates

Rates and Charges	FY '24	FY '25
Service Charge	$10.40	$11.13
Volume Charge: Single-Family Residential (per 1,000 gallons)		
Level 1: Up to 3,000 gallons	$5.56	$5.95
Level 2: 3,001 to 6,000 gallons	$11.15	$11.93
Level 3: 6,001 to 9,000 gallons	$16.71	$17.88
Level: 4: More than 9,000 gallons	$22.30	$23.86
Multi-Family/Non-Residential (per 1,000 gallons)	$11.15	$11.93
Sewer: All Users (per 1,000 gallons)	$11.06	$11.83

Combined Monthly Bill Comparison:
Single-Family Residential, 3,000 Gallons

Greene County	$90.90
City of Charlottesville	$79.08
Augusta County	$76.25
ACSA Proposed Rate	$64.47

serviceauthority.org Customer Service: 434-977-4511 custserv@serviceauthority.org

Sincere Thanks

- The development of the FY 2025 Budget proposal was a collaborative effort and was a successful endeavor thanks to:
- The ACSA Leadership Team
- Input from the Maintenance, Information Technology, Engineering, Administration, and Finance Departments
- Danielle Trent for the budget cover design
- The ACSA's accounting team, Deanna Davenport, Tonya Foster, Jennifer Bryant, and Theresa Whiting

Additional Questions?

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Advanced Metering Infrastructure (AMI) Project Completion Report	**AGENDA DATE:** May 16, 2024 **ACTION:** Informational
STAFF CONTACT/PREPARER: Quin Lunsford, Director of Finance	**ATTACHMENTS:** Yes

BACKGROUND:

The ACSA Board authorized staff at its October 2019 meeting to execute agreements related to the AMI project. Monthly status updates have been provided over the course of the last few years. We are pleased to report that all installations/upgrades have been completed.

DISCUSSION:

Over the past five years, the ACSA team and contractors have designed and deployed the AMI system. We have successfully installed 100% of the system with minimal disruption to our customers or operations. Our customers have received tremendous benefit in early leak identification limiting financial burdens and possible property damage.

Teams across the ACSA are using data collected from the system on a daily basis to analyze anomalies or be alerted to unexpected situations. We're excited to share a short presentation outlining project milestones and recognizing the organizational effort that ensured project success.

BUDGET IMPACT: Informational only.

RECOMMENDATIONS: None

BOARD ACTION REQUESTED: None; informational item only.

ATTACHMENTS: "Advanced Metering Infrastructure – Project Completion Report" PowerPoint Presentation

ADVANCED METERING INFRASTRUCTURE (AMI) – PROJECT UPDATE

MAY 16, 2024

AGENDA

- PROJECT MILESTONES
- AMI PROJECT UPDATE
- NEXT STEPS

PROJECT MILESTONES

May–Nov. 2018

AMI Feasibility Study

Oct. 2019

Board Authorization, AMI vendor selection and contract execution

Apr. 2021

Phase I

Feb.–Apr. 2022

Phase II

Apr. 2023 – Apr. 2024

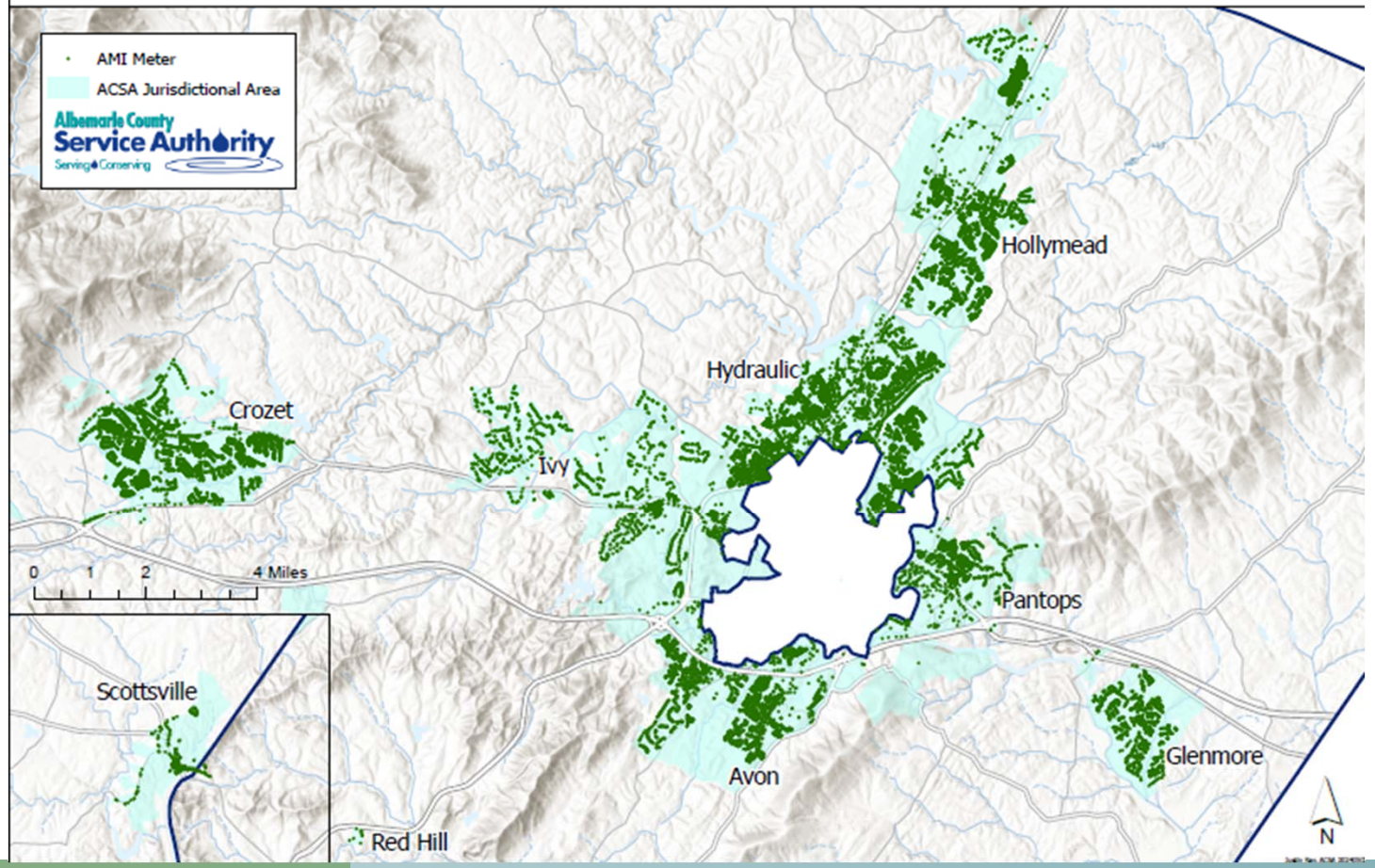
Final Deployment

Final Installation April 17, 2024

AMI PROJECT UPDATES

- 23,000+ AMI installations
- The Urban, Crozet, Scottsville, and Red Hill systems have been fully upgraded
- Daily analyzation of “high flow” and “continuous flow” alerts
- Daily monitoring of hydrant flushing devices

Advanced Metering Infrastructure (AMI)

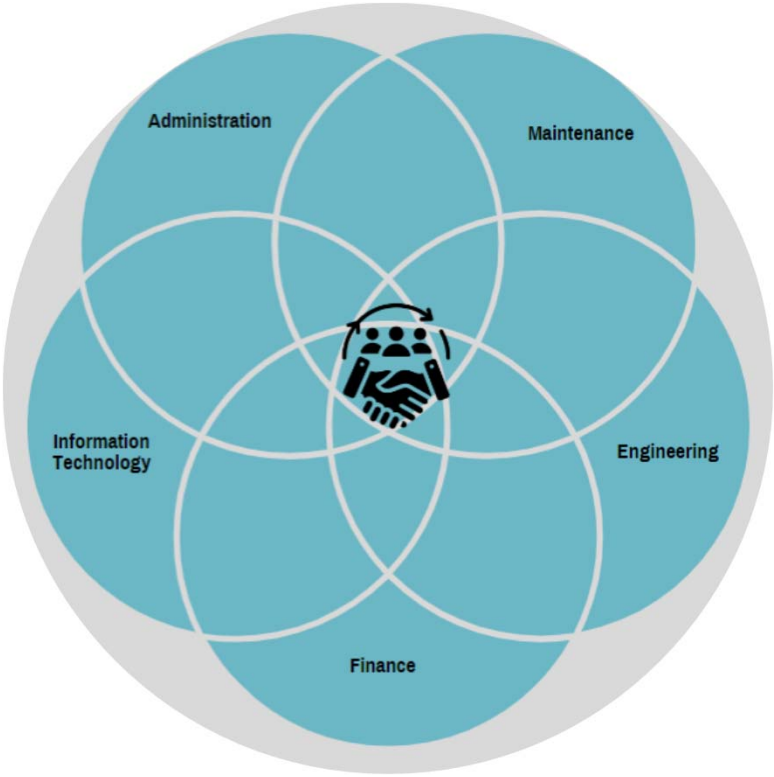


NEXT STEPS – POST DEPLOYMENT

- Optimization of field communication system
- Development/Configuration of a Customer Portal
    - Provides portal to customers to:
        - Monitor consumption
        - Troubleshoot possible leaks
        - Configure personalized alerts
- Consider additional tools to aid in overall system oversight and maintenance
- Re-allocation of staff resources from meter reading to large meter field testing program

STRATEGIC COLLABORATION AND ORGANIZATIONAL EFFORTS

- Deployment success thanks to organizational efforts and support over the project duration. Every ACSA employee contributed by:
  - Upgrading services, meter lids, setters, etc.
  - Assisting with software integrations
  - Installation of AMI infrastructure (antenna site work/electrical components)
  - Support and Maintenance of AMI infrastructure (antennas, modems, collectors)
  - Assisting with customer notifications by mail and phone
  - Troubleshooting non-communicating devices in the field and helping our customers understand the program
  - Learning and leveraging information gathered from new software systems (proactive leak notifications, auto-flusher monitoring, high flow events)
  - Project management and project cost monitoring/recording
  - Meter storage logistics, disposal of packaging, and coordination of deliveries related to the project.



QUESTIONS?

Albemarle County Service Authority
Serving Conserving

Join Us!!!

Annual Employee Picnic

@ Darden Towe Park

FRIDAY, MAY 24TH

12PM- UNTIL IT'S OVER

Catering provided by

KITCHEN
SMOKED
AND TAP

MOTION: **MEETING DATE:** May 16, 2024

SECOND:

RESOLUTION

BE IT RESOLVED by the Board of Directors of the Albemarle County Service Authority that the Board needs to enter into Executive Session to consider the following matter:

1. Pursuant to Va. Code §2.2-3711 A (1) to discuss personnel matters.

VOTE:

AYES:

NAYS:

(For each nay vote, the substance of the departure from the requirements of the Act should be described).

ABSENT DURING VOTE:

ABSENT DURING EXECUTIVE MEETING:

_____

Gary B. O'Connell, Secretary-Treasurer

MOTION: **MEETING DATE:** May 16, 2024

SECOND:

CERTIFICATION OF EXECUTIVE MEETING

WHEREAS, the Board of Directors of the Albemarle County Service Authority has convened an executive meeting on this date pursuant to an affirmative recorded vote and in accordance with the provisions of The Virginia Freedom of Information Act; and

WHEREAS, §2.2-3711 A (1) of the Code of Virginia requires a certification by this Board that such executive meeting was conducted in conformity with Virginia law;

NOW, THEREFORE, BE IT RESOLVED that the Board hereby certifies that, to the best of each member's knowledge, (i) only public business matters lawfully exempted from open meeting requirements by Virginia law were discussed in the executive meeting to which this certification resolution applies, and (ii) only such public business matters as were identified in the motion convening the executive meeting were heard, discussed or considered by the Board.

VOTE:

AYES:

NAYS:

(For each nay vote, the substance of the departure from the requirements of the Act should be described).

ABSENT DURING VOTE:

ABSENT DURING EXECUTIVE MEETING:

_____

Gary B. O'Connell, Secretary-Treasurer