

## BOARD OF DIRECTORS' MEETING

September 21, 2023  
 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](http://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](mailto: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. Approve Minutes of August 17, 2023
9:15 a.m.	3. Matters from the Public
9:25 a.m.	4. Response to Public Comment
9:35 a.m.	5. Consent Agenda
	a. Monthly Financial Reports
	b. Monthly Capital Improvement Program (CIP) Report
	c. Rivanna Water and Sewer Authority (RWSA) Monthly Update
	d. ACSA Board Policy Issues Agenda 2023
	e. Advanced Metering Infrastructure (AMI) Project Update
9:50 a.m.	6. Operational Presentation – JetScan 2.0 Camera
10:05 a.m.	7. Imagine a Day Without Water – Resolution
10:15 a.m.	8. Operational Presentation – Role of the Construction Inspector
10:35 a.m.	9. Strategic Plan 2023-2027 Update
11:00 a.m.	10. Items Not on the Agenda
	11. Adjourn





**ALBEMARLE COUNTY SERVICE AUTHORITY**

**STATEMENT OF CHAIR TO OPEN SEPTEMBER 21, 2023 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.



## Albemarle County Service Authority Board of Directors

The Board of Directors of the Albemarle County Service Authority (ACSA) met in a regular session on August 17, 2023, at 9:00 a.m. at the Administration and Operations Center at 168 Spotnap Road in Charlottesville, Virginia.

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

**Members Absent:** Mr. Nathan Moore.

**Staff Present:** Kenny Barrow; Mike Derdeyn; Brendan Ganz; Terri Knight; Jeremy Lynn; Quin Lunsford; Alex Morrison; Gary O'Connell; Emily Roach; Belinda Shifflett; Danielle Trent; Janet Vest.

**Staff Absent:** Jeremy Lynn; Gary O'Connell

**Public Present:** None.

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

Mr. Armstrong called the meeting to order. He then read the opening Board Chair statement (Attached as Page \_\_\_\_\_), and a quorum was established.

### 2. Employee Recognition – Debbie Grady – 45 Years of Service

Mr. Armstrong stated that Ms. Debbie Grady was retiring after 45 years of service, but she was not present at the meeting. He stated that there was a resolution, which he then read (Attached as Page \_\_\_\_\_). He asked whether there was a motion for the recognition.

***Mr. Tolbert moved to adopt the recognition, seconded by Dr. Palmer. All members voted aye.***

### 3. Approve Minutes of June 15, 2023

Mr. Parcells noted there were two tiny errors in the minutes. He said the one of the errors was on page 11, line 16. He said they needed to add, "of the plan." He said on page 19, line 12, "that" should be "who."

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1 Dr. Palmer stated she wanted to add one more correction. She noted  
2 that on page 4, line 11, it should read, "ACSA," not, "ASA."

3 Mr. Parcels said he enjoyed reading the technical transcript and  
4 noted that it had a few different perspectives. He said that together, the  
5 transcripts would have been perfect, but it matched the quality of the staff  
6 version.

7 Dr. Palmer noted she was not present at the last meeting, so it was  
8 challenging putting the two transcripts together. She explained she ended  
9 up taking one section from each version and put them next to each other.  
10 She said it was interesting that there were times when she was unsure if it  
11 was said or not. She assumed that the interpretation would be to say the gist  
12 of it, but she was not sure. She said she enjoyed the staff way that they do  
13 it better because it explained it a little bit better, but at the same time, it was  
14 more verbatim on the other. She wished she had been present to hear the  
15 meeting, and she noted that there was a tremendous desire to put this to a  
16 paid company, and she did not object to that. She saw the value in staff  
17 reviewing the transcript and massaging it.

18 Mr. Tolbert said there was an opportunity to review the minutes that  
19 were provided and add additional context.

20 Mr. Parcels asked how much time it took to draft the minutes. Ms.  
21 Trent replied it was about 4 hours of work per hour of audio. Mr. Parcels  
22 noted that reviewing the prepared transcript would require less time. Ms.  
23 Trent said yes. Mr. Parcels said he agreed with Dr. Palmer regarding the  
24 perspective staff added to the minutes. He hoped that in switching to the  
25 transcript method, staff would have a chance to provide any missed  
26 perspectives from the transcripts. Ms. Trent noted that as time went on, the  
27 company may become more familiar with the organization. She said that she  
28 may need to massage the transcript to not take away from the context of  
29 what was said in the meeting.

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1 Dr. Palmer noted if they hired somebody else to take on that, and  
2 they did not have the context or knowledge, they would be better off with a  
3 straight verbatim.

4 Mr. Tolbert asked if the company did court reporting. Ms. Trent  
5 responded that they did not do court reporting, but they worked with Rivanna  
6 and other County entities. Dr. Palmer said that the transcription company,  
7 Golden Transcription Services, also did the minutes for the Board of  
8 Supervisors. She explained that when she was on the Board of Supervisors,  
9 she would interact with the owner of the company sometimes in the office,  
10 and she had been around for quite a while.

11 Mr. Roberts asked whether someone from the company would be  
12 present at the meetings or if they would work from recordings. Ms. Trent  
13 replied that it would all be from recordings, and they would try to provide the  
14 actual video. She noted the company had not indicated they would be joining  
15 the meetings, but they would have audio and video recordings. Mr. Roberts  
16 said he guessed that the word-for-word reporting met the legal requirements  
17 for the minutes. He said they were lucky to have staff write the minutes, but  
18 he was not opposed to the transcription company doing it.

19 Mr. Parcels asked which version would be approved.

20 Dr. Palmer stated she would abstain because she was not present  
21 at the meeting.

22 Mr. Armstrong said they should move into the new age and approve  
23 the Golden Transcription Services minutes. Mr. Barrow noted they could  
24 approve the minutes as supplemented by the verbatim transcript. Mr.  
25 Armstrong asked if there was a motion to approve the minutes supplemented  
26 by the verbatim transcript.

27 ***Mr. Parcels moved to approve the minutes as supplemented by***  
28 ***the verbatim transcript seconded by Mr. Tolbert. All members voted***  
29 ***aye.***  
30  
31

**Albemarle County Service Authority Board of Directors**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**

**b. Monthly CIP Report** – Mr. Parcels noted that item 14, page 90, the Madison Park Pump Station, stated there was difficulty obtaining the pump skid. He asked for further information about that in terms of why ACI was having trouble and details about the pump manufacturer. Mr. Morrison replied he believed it was coordination between the manufacturer and the consultant engineer reviewing the submittal, but he would need to follow up with more information.

Mr. Parcels said his question was tied to item 26, page 96, where they discussed the SCADA time. He noted that the SCADA time would obviously be delayed for the pump station, and he asked how that would affect the overall goal and what the timing issue was. Mr. Morrison replied that Madison Park was not included as part of the SCADA Phase 3 project. He said SCADA would be installed as part of the Madison Park pump station upgrades standalone project, and it would not impact the SCADA Phase 3 project. He said that Madison Park would not be online with SCADA until the other project was completed, but they would continue with the Phase 3 project to bring SCADA system access online. Mr. Parcels asked if there was a timing for Madison Park. Mr. Morrison stated he would have to follow-up with more information.

Mr. Parcels noted that for item 17, page 91, the Biscuit Run sewer, it stated Linco was no longer interested, and Prism was taking over some of the infrastructure work. He asked what the alternatives were. Mr. Morrison replied that since Linco was no longer interested in the

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1 contract, they had to go out and request quotes, so it was open to  
2 multiple contractors. He noted Prism would most likely be a contractor  
3 to submit a bid. He said that for procurement reasons, they had to go  
4 through the solicitation of multiple prices. Mr. Parcels asked whether the  
5 timing would be affected. Mr. Morrison responded that there would be a  
6 slight delay because the process for requesting and receiving bids took  
7 time, but once they received and reviewed them, they would be able to  
8 award the contract and get construction on repairs underway.

9 Mr. Parcels noted that on page 99, the North Point private  
10 development had a sewer addition for 179 units. He assumed it was  
11 included from a growth perspective for trunk sewer capacity issues. Mr.  
12 Morrison said he did not believe North Point discharged to the Airport  
13 trunk sewer. He explained the pump station discharged near Airport  
14 Road which went to the Powell Creek interceptor. He said he would  
15 provide follow-up information after verification.

16 Mr. Parcels noted he reviewed the master plan, and he was  
17 surprised because the County envisioned 38k units by 2050. He  
18 mentioned that it was just for the north part of the County. Mr. Morrison  
19 said that was correct and noted they had meetings with the County  
20 regarding the AC44 update. He said that at the meeting, they reviewed  
21 the current growth areas, what had been approved, projects in the  
22 pipeline, what had been proposed, and how the projects factored into  
23 other areas of consideration. He mentioned they held the meetings in  
24 conjunction with RWSA to ensure they took a holistic look at their  
25 systems to ensure any required projects were put in place to facilitate  
26 the envisioned growth.

27 Mr. Parcels asked if the future growth of the organization would be  
28 included in the future planning and vision. Mr. Lunsford responded that  
29 the Avon Property was certainly one example of taking steps to prepare  
30 for the growth of the system, and it was absolutely something they would  
31 look at. He said they had seen increases in different departments from

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1 the staff perspective over the last few years. He said that with open  
2 communication between the County, RWSA, ACSA, and all community  
3 partners, they were doing what they needed to do to take care of future  
4 goals. He said that it was a challenge, and there were financial aspects  
5 that needed to be considered.

6 Mr. Roberts asked whether an impact statement was being  
7 performed on how the infrastructure would be impacted. Mr. Morrison  
8 replied that if there were parcels within the growth area under a rezoning  
9 application, they would go through the site review committee with the  
10 County, and they sat on the committee. He explained that as part of the  
11 review of zoning map amendments, special use permits, or proposed  
12 developments, they identified red flags with service provisions. He noted  
13 that there were steps throughout the process where they could identify  
14 capacity issues. He explained that with larger developments, there was  
15 typically master planning prior to the zoning map amendment, and they  
16 were able to identify at that point any larger scale projects that may  
17 require offsite or involve RWSA.

18 Dr. Palmer noted that there was always a line in the Board of  
19 Supervisors and Planning Commission documents stating that RWSA  
20 and the ACSA had signed off on the project. Mr. Roberts noted that  
21 impact statements had to be made at the General Assembly when he  
22 was working because he had to write them. Dr. Palmer said she did not  
23 know about the impact statements, but the Board of Supervisors often  
24 asked for more information about the impact statements. She noted that  
25 many years ago, Stonefield had a different name, and that was a  
26 debacle of communication. Mr. Roberts noted that the growth was  
27 considered in the approval process of North Point. Dr. Palmer said she  
28 had become more comfortable with the process over the years as things  
29 had improved.

30 Mr. Tolbert asked what an E/1 system was as mentioned on page  
31 91. Mr. Morrison replied that an E/1 system was an alternative to a public

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1 pump station. He explained that there was a common force-main  
 2 generally located in the right-of-way or along the road owned and  
 3 operated by the ACSA. He said each individual home had a collection  
 4 tank and grinder pump which connected to the force-main. He explained  
 5 that the homeowner owned, operated, and maintained a tank, pump,  
 6 and small-diameter force-main which connected to the pipe in the right-  
 7 of-way. He said that it was a large-scale pump system to collect sewage  
 8 from homes in lieu of a larger public pump station and gravity collection.  
 9 Mr. Tolbert asked whether it was a common way to deal with it in a  
 10 subdivision. Mr. Morrison replied that it would be one of the first they had  
 11 in the ACSA system, but it was a common system in other municipalities.

12 ***c. CIP Authorizations***

13 ***d. Monthly Maintenance Update***

14 ***e. Rivanna Water and Sewer Authority (RWSA) Monthly Update***

15 ***f. ACSA Board Policy Future Issues Agenda 2023***

16 ***g. Advanced Metering Infrastructure (AMI) Project Update***

17 ***Mr. Parcells moved to approve the consent agenda, seconded***  
 18 ***by Mr. Tolbert. All members voted aye.***

19  
 20 7. **Request for Approval – Annual Year-End Appropriations**

21 Mr. Lunsford said he would speak to the matter briefly. He said that it  
 22 was something they did each and every year as part of the new fiscal year  
 23 budget process. He explained that any items from the prior fiscal year that  
 24 they budgeted for were requested for reappropriation. He said that a list of  
 25 items in detail was provided to the Board. He said they were requesting  
 26 reappropriation of \$237,211.

27 ***Mr. Parcells moved to approve the reappropriation, seconded by Dr.***  
 28 ***Palmer. The Chair asked for a roll-call vote: Mr. Parcells, aye; Dr.***  
 29 ***Palmer, aye; Mr. Tolbert, aye; Mr. Armstrong, aye; Mr. Roberts, aye.***

30 8. **Operations Presentation – Employee Training & Biz Library**

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1           Mr. Lunsford stated that Ms. Roach and Ms. Walker would give a  
2 presentation on employee training and the online training suite called Biz  
3 Library.

4           Ms. Roach said they would provide a high-level presentation on  
5 various training tools and training provided to ACSA employees. She said  
6 Malcolm X said it best, that growing is the result of learning. She said they  
7 strongly believed in investing in employees to help them grow. She said they  
8 offered multiple trainings throughout the Authority which were required by  
9 law or regulation. She said the Authority believed in thinking of employees  
10 holistically, and research had proven that employees faced many challenges  
11 outside of work that could impact their ability to perform work. She said that  
12 they often included training that was not necessarily work related, but it could  
13 be impactful for employees. She said that there was an employee assistance  
14 program where they partnered with UVA. She said those were free and  
15 confidential services for employees and household members.

16           Ms. Roach stated they worked with external organizations. She said  
17 the lead team and supervisors had participated in Darden's Leadership  
18 Development Training Program. She said they were working with PVCC's  
19 Shippers Choice CDL Program because of a new regulation. She said  
20 students had to participate in a required number of classroom trainings  
21 before obtaining a CDL. She said they worked with PVCC for first aid and  
22 CPR training. She said they used various coaches for leadership  
23 development training for supervisors and potential supervisors.

24           Ms. Roach highlighted that there was a course, certificate, and  
25 degree program available to all employees who wished to pursue training on  
26 their own time. She said employees who completed trainings were eligible  
27 for a cash bonus or base pay increase if they received a C or better in the  
28 course. She noted that COVID-19 caused the Authority to reconsider how it  
29 performed trainings. She said that during the pandemic, they implemented a  
30 new learning management system called Biz Library.

31           Ms. Roach stated Biz Library allowed them to rethink the training

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1 approach. She explained it was a single platform to track employee training.  
2 She said they were seeing the benefits of Biz Library immediately. She said  
3 that supervisors had the ability to assign trainings to a group of employees  
4 or as individuals. She said employees received notifications as soon as the  
5 course was assigned and when it was completed or overdue. She said  
6 supervisors also received notifications. She said over the next few slides,  
7 there would be an overview of different trainings, and later on, there would  
8 be reports that supervisors and employees were able to see for courses.

9 Ms. Roach said Biz Library offered various training categories, and  
10 there were over 1,000 available offerings. She said that employees were  
11 able to take trainings on their own time. She said some trainings were broken  
12 up into sections, and within each section, there was a quiz on the content.  
13 She explained that Biz Library allowed the Authority to upload organization-  
14 specific trainings, so employees could review the training or make up missed  
15 sessions.

16 Mr. Parcels said he liked the approach which was taken in terms of  
17 providing the opportunities to the employees. He asked how the employees  
18 perceived and responded to the Biz Library program. Ms. Roach responded  
19 that employees appreciated the optional trainings, which were well-received.  
20 She said employees had requested or suggested trainings to include. She  
21 said that normally, a minimum of 10 people participated in the training. She  
22 said that last week, a company had discussed navigating Medicare and  
23 preparing for future events. She said they tried to think of employees in  
24 different aspects of their life and career.

25 Dr. Palmer noted that on slide 10, there were categories, and under  
26 software, there were 3,037. She asked if the numbers referred to the number  
27 of course available in the program. Ms. Roach replied yes. Dr. Palmer  
28 assumed that many of the trainings were not relevant for to the organization.  
29 Ms. Roach said they would not be utilizing all of the trainings because some  
30 may not be relevant to the organization. Dr. Palmer asked what type of  
31 training was not covered by the Biz Library. Ms. Roach responded that Biz

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1 Library was not intended to replace other required training, and it was meant  
2 to be supplemental. She said that confined space training or asbestos  
3 training was not completed within Biz Library, among other trainings. Dr.  
4 Palmer asked if there were non-hands-on trainings that were not included.  
5 Ms. Roach said she could not think of anything. Mr. Lunsford responded that  
6 the Darden Leadership Program was not through the Biz Library. He noted  
7 staff took advantage of conferences around the country, and those programs  
8 continued. He said that Biz Library served as a supplement to many of the  
9 specific trainings offered by the Authority.

10 Mr. Tolbert asked if all the sessions were computer oriented. Ms.  
11 Roach said yes, most were videos, and they could range from 2 minutes to  
12 a couple of hours. Mr. Tolbert asked how they addressed employees who  
13 spent most of their time away from the office. He asked how those  
14 employees would get time to spend at a computer for the training. Ms. Roach  
15 responded that most employees had access to an iPad or a phone. She said  
16 that there were computers upstairs employees were able to utilize, and most  
17 had access to laptops or an Authority phone. She noted that the training was  
18 accessible on mobile devices. Mr. Tolbert mentioned that iPads and laptops  
19 seemed to be fine, but a phone was not an appropriate way to review the  
20 training.

21 Mr. Armstrong thanked Ms. Roach for putting the presentation  
22 together.

23  
24 9. Advanced Metering Infrastructure (AMI) Project Update

25 Mr. Lunsford stated that they continued to make progress on the AMI project.  
26 He said they prepared a short presentation to give a general overview of  
27 where they were, and they would focus on a few critical successes specific  
28 to customers. He stated that Ms. Knight, Mr. Barrow, and Ms. Vest would  
29 provide a presentation.

30 Ms. Knight stated that they worked daily to review the software and  
31 infrastructure. She said that they would begin with the project status. She

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1 said that through three years of planning, the project was well underway.  
2 She said that as of that morning, over 36% of the system was deployed and  
3 fully operational. She said the presentation would provide an overview of the  
4 information the team reviewed daily to best serve the customers. She said  
5 as far as upgraded and operational systems, the graph on the slide showed  
6 7,591, but as of that morning, they were up to 8,019. She said that as far as  
7 scheduled meter change outs, there were down to 3,700 left. She said that  
8 in terms of retrofits, they were over 10k left to be completed, but those were  
9 less disruptive to customers. She explained the contractor installed an MXU  
10 device so the meter would communicate to the towers, and she noted  
11 customers did not experience service disruptions. She said that in terms of  
12 the meter changeouts, there had been very few customer complaints.

13 Ms. Knight said every morning, they sent an email to staff with a daily  
14 update and a weekly projection graph of where they were and what the  
15 contractor had done. She said they were retrofitting about 100 meters per  
16 day, and they were pleased with the numbers.

17 Dr. Palmer asked what "no read" and "bad read" meant. Mr. Barrow  
18 replied that the data came directly from the PMI portal, and "no read" meant  
19 they had not received any readings from the meter, and he did not know  
20 what a "bad read" meant. He said that PMI used the data to track the devices  
21 they installed. Dr. Palmer asked what a stale read was. Mr. Barrow  
22 responded that a stale read was when no readings had been gathered from  
23 a meter in three days. He said that there could be various reasons for a stale  
24 read, such as the antenna being cut off. Dr. Palmer asked if the property  
25 owners were informed if stale reads occurred. Mr. Barrow said no. He said  
26 they handled it by replacing the lids that were cut off with recessed lids, and  
27 if it happened again, they notified the homeowner that they would have to  
28 pay for replacements. He hoped that the recessed lids would address most  
29 of the problems.

30 Ms. Knight stated that they were happy with the system and the  
31 contractor. She said they uploaded to the billing system daily, and files came

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1 in accurately.

2 Mr. Parcels asked at what point the contractor turned the meter over  
3 to the Authority. He asked if there was a requirement for the contractor to  
4 have a good meter reading to provide the Authority before turning it over.  
5 Mr. Barrow replied that so far for the project, if there was any work that  
6 needed redone, the contractors were sent back out to take care of the work.  
7 He said that until the project was complete and fulfilled, any problems would  
8 be corrected. He said that stale meters were different because there could  
9 be other causes. Mr. Parcels clarified that when they replaced the meter  
10 tops with recessed lids, they were sending PMI to do the replacement. Mr.  
11 Barrow replied no because the damage was often done by the customer. He  
12 said that PMI would not use its inventory since the meter had been  
13 functioning.

14 Ms. Knight stated that as they were installing new meters, the new  
15 meters had the MXU devices already installed, and they were AMI-ready.  
16 She said that Mr. Barrow and Ms. Vest would tag-team and discuss daily  
17 review and consumption.

18 Mr. Barrow stated that when the project first started, they did not  
19 have many in the ground, and he was the only one reviewing it. He said  
20 various alerts would come in, and he would investigate the issues. He said  
21 that when they reached full deployment, he was unable to keep up with the  
22 reports on his own. He explained that the customer service team had access  
23 to census analytics and to the RNI, and they were monitoring the system.  
24 He said he primarily focused on the infrastructure, and he had delegated  
25 customer notification of leaks to the customer service team.

26 Mr. Barrow gestured to the screenshot shown on the screen, which  
27 was of the main dashboard of the Regional Network Interface (RNI). He  
28 explained that basically, the meters were communicating and sending the  
29 data to the radio units, the MXUs, the MXUs were communicating to all of  
30 their tower sites, and all of that raw meter data, including readings, alerts,  
31 and alarms, was coming into the RNI, and this dashboard was where they

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1 would see that. He said that they could see the main dashboard and the pie  
2 chart, and the various alerts they received. He said that they broke it down  
3 into critical alerts, major alerts, minor alerts, and information alerts. He stated  
4 that they considered a continuous flow or a customer leak being a minor  
5 alert, and while to him that was not a minor thing for a customer. That was  
6 how they did it. He said that the major alerts that they considered were the  
7 really extreme high flows, such as if a pipe burst. He said that they had a few  
8 ally meters in the system, and he believed they had about 50 of those  
9 deployed. He said that an ally meter was a meter capable of being remotely  
10 turned on and off, which was not a function that they planned to use, but the  
11 meter also monitored water temperature and pressure. He said that so, the  
12 engineering team got together and said that they wanted to measure  
13 pressure in certain areas of their system, so they bought about 50 of these  
14 meters and deployed them out to monitor the pressures. He said that when  
15 they set the parameters of the pressure alerts, if the low pressure and high  
16 pressure exceeded this pressure, they wanted an alert, which was what the  
17 critical alert was. He said displayed on the screen was what the alert page  
18 would look like. He said that when he first got into work in the morning, he  
19 would look at the overall system and make sure the towers were up and  
20 running, everything was working the way it was supposed to work, and then  
21 he looked primarily at the high flow alert. He said that Ms. Vest would talk in  
22 a minute about how she looked at the continuous flow, but he had gotten  
23 away from that and looked at high flow first because that was where a  
24 customer may have a pipe that had burst. He explained that a high flow was  
25 500 gallons per hour, so if the meter was going 500 gallons per hour, he  
26 would get that high flow alert. He said they were getting a lot of them now  
27 because customers' irrigation systems were turning on in the middle of the  
28 night and were using a lot of water. He said that he was weeding through the  
29 irrigation systems to find what was not an irrigation system that was having  
30 a really high flow.

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1 Dr. Palmer remarked that she was surprised there was that much  
2 water coming out of irrigation systems. She asked if it was out of very large  
3 irrigation systems.

4 Mr. Barrow replied no, it could be like residential in Glenmore. He  
5 said that installers were currently working in the Glenmore subdivision and  
6 they were seeing a lot of high flow alarms come in overnight. He said that  
7 they would run 500, 600, or 700 gallons per hour for two or three hours.

8 Ms. Vest said with the high flow yesterday, out of the list she had,  
9 only one was a question and everything else was irrigation.

10 Mr. O'Connell asked how it was known that it was irrigation an issue.

11 Mr. Barrow said that it would be on their irrigation meter because  
12 they had auxiliary meters. He said that if it was a customer that had an  
13 exclusion meter behind it, they were making an assumption, because the  
14 rest of the day looked normal and it was just high for like two or three hours,  
15 so they were going on the assumption that the irrigation system was running  
16 even though the exclusion meter was not already in the system, but the  
17 primary meter was.

18 Ms. Vest said that when she had the list, she followed up in Bill  
19 Master. She said that if it was a resident that had an exclusion or auxiliary,  
20 such as a customer she looked up yesterday that used 17,000 gallons last  
21 month, but if it was a customer that rarely used their system, it was  
22 something they needed to look at.

23 Mr. Roberts asked if they had towers to accommodate all of their AMI  
24 systems, and he asked approximately how they determined the cost that  
25 they had to pay to use the tower.

26 Mr. Barrow said that he would let Mr. Lunsford talk about the cost,  
27 but they did not have everything built out yet. He said that they had one tower  
28 to go, which was at the UVA site. He said that they ran into difficulty up there  
29 because they originally wanted to put it on the Observatory tank but UVA did  
30 not want anything put on their tank, so they offered an alternative site fairly  
31 close to the tank for them to use. He said that it was a supply yard they had

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1 near Scott Stadium. He said they were going to put a wooden telephone pole  
2 to put the antenna on it, but they drilled and hit rock, and they even hired a  
3 special company to come in and try to drill it out, but that did not work. He  
4 said that they pursued an alternate plan where they were going to pour a  
5 concrete pad and put their own tower, which was a triangular metal structure  
6 like they had with their Ashcroft tank. He said that it took some time to get  
7 that designed and given to the UVA team, and UVA had reviewed it and  
8 signed off on it, so now they were going back to the contractor who was  
9 going to build all of that and get that up. He said that the UVA tower was the  
10 last one that needed to be put up. He said that there were pockets within the  
11 County where there was no cell phone signal, and the same thing was true  
12 of their radio. He said that they were finding now when they were in full  
13 deployment that radios and meters were going in certain areas but they were  
14 not hearing them and the signal was not getting out. He said they knew there  
15 were going to be pockets like that, and there was a smaller version of a tower  
16 called an R-100 that they knew they would need about 5 or 6 of those  
17 deployed around the County in strategic areas to pick up the others. He said  
18 that would not be done until the end of the project when they could identify  
19 exactly where they needed to go. He said that they had one that was installed  
20 on the roof of the Red Hill School because the school was an outlier, and it  
21 was just 12 meters there so they put the R-100 there and were reading all of  
22 those. He said that all of the infrastructure was not quite in as far as the  
23 towers go and the R-100s, but the bulk of it was.

24 Mr. Lunsford said that to piggyback on what Kenny said, the  
25 propagation study process was an evaluation of what they were  
26 communicating to where and was incredibly educational for them. He said  
27 that interestingly, the UVA site was only covering 100 unique meters, so it  
28 had an incredibly amount of redundancy to other antennas, but there was  
29 only about 100 meters that that was the only tower that it would communicate  
30 with. He said that while it was critical from a redundancy standpoint, that one  
31 site being the site being delayed was not a dealbreaker, and it was fortunate

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1 in that perspective. He said that related to costs, they had been fortunate  
2 that a lot of ACSA assets were strategically elevated, as were Rivanna's,  
3 and they had been able to co-locate on those assets, the water tanks  
4 throughout the County. He said that they did have two lease agreements, a  
5 site within the City, the Norfolk Southern tower where their consultants  
6 helped them negotiate an annual lease, as well as a site east of the urban  
7 area with a cell tower that they were able to co-locate on, so there was a  
8 monthly charge associated with that. He said that that tower in particular was  
9 \$550. He said that having one or two of those was not cost prohibitive, but it  
10 gave them an incredible amount of redundancy having those antennas up  
11 throughout the service area.

12 Mr. Roberts asked if they paid those costs with the service fee bonds  
13 that were collected.

14 Mr. Lunsford said sure, that was included in the service charge. He  
15 said that they were recouping those types of costs, meter costs, and things  
16 of that nature.

17 Dr. Palmer asked Mr. Barrow if they were seeing a lot more irrigation  
18 systems put in.

19 Mr. Barrow said that they were seeing the AMI components being  
20 added to the existing irrigation systems.

21 Ms. Knight said yes, pretty much every new development was  
22 coming along with an underground irrigation system that was separately  
23 metered.

24 Dr. Palmer said that she recognized that this was not a discussion  
25 for right now, and she knew that it was problematic, but she was listening to  
26 these numbers and wondering if they should be thinking about adding a level  
27 five to the rate structure for water.

28 Ms. Knight said they were seeing it a lot more now because they  
29 were actually working in cycle 3, which was Glenmore. She said that before,  
30 they were not seeing all these high flows and continuous flows where they

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1 had to dig a little deeper, so now they were seeing that now that they were  
2 doing the channel exclusions.

3 Ms. Knight said that to help Dr. Palmer understand, the North Point  
4 development's developer put in two taps for every lot, one for the domestic  
5 meter and one was for the irrigation.

6 Mr. Parcels said that in terms of future planning, it was one thing to  
7 be planning for human consumption kinds of uses, but the irrigation was a  
8 big unknown in a lot of cases.

9 Dr. Palmer said that people wanted green lawns.

10 Mr. Parcels asked if there could be a different rate structure for  
11 irrigation.

12 Mr. Lunsford said that there was, which was the tiered structure. He  
13 said that there were four levels currently, and 1000 gallons in level 4 was  
14 incredibly expensive compared to level 2.

15 Dr. Palmer said that they then got into all kinds of issues with  
16 commercial, institutional, and multifamily. She said that it got really  
17 complicated, and she recognized that, but it did make her wonder if this could  
18 be altered or looked at again.

19 Mr. Roberts asked if connection with an irrigation meter was billed  
20 separately.

21 Ms. Knight said that it was recorded separately because it was a  
22 separate meter for that irrigation usage.

23 Mr. Tolbert asked how they billed for irrigation.

24 Ms. Knight said that it was billed to one bill because they combined  
25 the two meters to the one account, but yes consumption was recorded  
26 separately.

27 Mr. Tolbert said that it could be billed separately.

28 Mr. Parcels said that he was wondering if they would not want to  
29 create that sort of category.

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1           Mr. Lunsford said that maybe this was an opportunity, as they were  
2           in a slower month, to prepare a presentation to illustrate this, so everybody  
3           could see exactly how exactly it was handled.

4           Mr. Barrow said that there were still quite a few private exclusion  
5           meters out there that would not be on their AMI system until they figured out  
6           what they were going to do with them. He asked if there were any more  
7           questions before they continued with the next slides. He said that the slide  
8           on the screen displayed Sensus Analytics (SA). He said the RNI was  
9           collecting all the raw data, and that raw data from the RNI was combined  
10          with the files that come from their billing system, and it married all that raw  
11          data to the customers' accounts. He said that was what was went into the  
12          Sensus Analytics system, and it was one of the main dashboards they looked  
13          at to see what was going on with how many active meters they had, how  
14          many orphaned meters they had, and how many stale and almost stale. He  
15          said that where it said 15 no reads, those were all primarily out in the Ivy  
16          area, because they knew Ivy was going to be a problem area as far as  
17          coverage. He said that there were a couple of R-100s proposed in that area  
18          and they were hoping that when UVA came online that the number would go  
19          down. He said that they talked about what stale was, which was when they  
20          had not heard from them, almost stale was two days, and an orphaned meter  
21          was a meter that they were getting data in the field from but there was  
22          nothing in their billing system that matched. He said that typically what that  
23          was if they went out and installed a new meter, it would start communicating  
24          right away, and it may take a couple of days for them to put a work order into  
25          the billing system to marry that data off, so that was what the orphaned  
26          meters were.

27          Mr. Lunsford said that the 288 number right now reflects most of what  
28          PMI, the AMI contractor, has installed. He said that they haven't had the  
29          opportunity to marry that yet, but when the project was finished the orphaned  
30          meters would probably in the 5 to 10 range.

31          Ms. Knight said absolutely.

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1           Mr. Barrow said yes, it would basically just be new construction. He  
2 said that he would let Ms. Vest speak to the next slide as she was the one  
3 doing most of the customer contact.

4           Ms. Vest said that first thing in the morning, one of the things she  
5 worked on was high flow. She said that Mr. Barrow was there before her, so  
6 he was looking at that and she was following up, so she was sort of learning.  
7 She said that she downloaded a report and looked at that individual meter to  
8 see if it was still ongoing or it stopped. She said that probably 95% of them  
9 had stopped, where it had happened overnight and the high flow was gone.  
10 She said that she had one where they were using over 500 gallons an hour,  
11 she called them and they said that it was the toilet and that they would get  
12 it, and the next day it stopped and was not on the list when they looked again.  
13 She said that continuous flow was sort of looked at in the same way they did  
14 with the meter readers, so if there was high consumption they sent them  
15 back out to double check for possible signs of a leak. She said that if there  
16 were no signs of a leak, they contacted the customer and they could check  
17 the property, and if there was a possible leak, they were reached out to when  
18 they knew there was a possible leak to let them know what was going on.  
19 She said that they were doing that with AMI as well. She said that for  
20 continuous flow, if they had a continuous flow and now it was back to their  
21 norm, to her that was the same as if the guys were out checking and it went  
22 back down, and there was no sign of a leak. She said that at first they were  
23 calling the customers, but then they could not locate it because it had  
24 stopped, so they did ongoing continuous flows. She said that she and  
25 another co-worker had reached out to customers and they had had people  
26 say that their water hose was going outside and they had forgotten it and left  
27 it on. She said that they had a lot of customers who they called about ongoing  
28 flow that could tell them right then and there what it was and it stopped. She  
29 said that they noticed it had been helping as far as adjustments in the bill,  
30 because if the readings were coming in through the meter reader, they were  
31 not seeing it for a whole month compared to seeing it in real time right then

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1 and there. She said that it had cut down on adjustments because they were  
2 getting these before they even got to that point where they had a \$5,000  
3 water bill. She said that it was really helping, and a lot of customers had  
4 asked when they would be able to look themselves, which they were looking  
5 into.

6 Ms. Knight said that it was also important for water conservation  
7 because they did not have all that leakage soaking into the ground or going  
8 into the sewer system. She said that it was amazing how many people knew  
9 right offhand that they had a toilet malfunctioning, but until they called them,  
10 they did not think of turning it off or getting it fixed.

11 Mr. Barrow indicated the graph on the screen that showed one  
12 particular customer. He said that they could see there were periods when  
13 there was nothing being used, then there were spikes, and then there was  
14 normal consumption. He said that then, they had this happen. He said that  
15 he came in one morning, the high flow alert came in around 6:00, and she  
16 was using over 600 gallons per hour and went as high as 1,300 gallons per  
17 hour. He said that based on the previous consumption, he knew that  
18 something was wrong and asked the meter technicians to go out there and  
19 verify that this was right and what they were seeing was correct. He said that  
20 the technician went out there and said that the meter was compliant, so he  
21 asked the technician to knock on the door and talk to the customer. He said  
22 that the customer came to the door and said that they did not have anything  
23 running. He said that the technician said the meter was showing that they  
24 were using a whole lot of water, and asked them to turn their main valve off  
25 while he checked the meter to see if it was outside or inside. He said that  
26 they went down to the basement to turn off the main valve and the basement  
27 was flooded. He said that they had not heard it, and the elderly resident had  
28 her daughter go down to check it, and found the basement flooded.

29 Ms. Vest said that once they got that turned off, they reached out to  
30 the plumber, Mr. Gentry, and she got the bill in an email, did the adjustment,  
31 and it was not even \$30 compared to what could have been hundreds of

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1 dollars or even \$1000 a month later. She said that it was fixed within two  
2 hours.

3 Mr. Barrow said that it was very quick, and especially with the  
4 situation of her being elderly and not doing very well, her basement could  
5 have run a lot harder than it did and a lot more damage than it did, so this  
6 was a pretty good success story for their project.

7 Ms. Vest said that she got a plumber out there that day and they got the bill  
8 showing it was repaired.

9 Ms. Knight asked if there were any other stories they wanted to  
10 share, as they had a lot of customers.

11 Ms. Vest said that it was nice that they had this, and it was coming  
12 more online each day where they could see more and more. She said that  
13 since she worked with the meter reading, she could see all of it. She said  
14 that it was really good that they could go right then and there and say they  
15 had something going on, and for a customer to say they knew what it was a  
16 great experience, and the customers were happy that they were reaching  
17 out to them.

18 Dr. Palmer said that she could remember a story that she heard here  
19 many, many years ago about an elderly couple whose basement flooded for  
20 a month. She said that it was really good to hear, because there were a lot  
21 of people who just did not hear well out there.

22 Ms. Knight said that the AMI project continued to progress. She said  
23 that they anticipated significant completion by the spring of 2024. She said  
24 that the ACSA staff, including meter reading staff, customer service staff,  
25 engineering, maintenance, everyone had embraced the additional  
26 information that the software made available, and they continued to refine  
27 and improve internal processes. She said that early communications of  
28 potential water-related issues to customers had been well-received and  
29 contributed to the improving of their customers' experiences.

30 Mr. Lunsford said that it gave their team an opportunity to have an  
31 entirely different conversation with the customers the day of and the day

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1 after. He said that he knew the team really appreciated that. He said that one  
2 of the added benefits of this installation right now was that they had asked  
3 their contractor doing the work on their pipe material in to present in  
4 conjunction with the new lead and copper identification stuff that they were  
5 required to do. He said that they were providing the information to the teams  
6 to analyze that, and that was an added benefit. He said that one thing that  
7 he wanted to be sure of was that finance got to use this tool right now a lot,  
8 one largely because maintenance was jumping on issues that were identified  
9 in this project incredibly quickly, so the contractors were there and shared  
10 that there were not metered operations or a center needed to be lowered or  
11 an old, fragile, galvanized pipe, the maintenance team was jumping on that.  
12 He said that they had been successful because of different departments  
13 supporting this endeavor.

14 Mr. Barrow said that while they used it primarily in their engineering  
15 department, it had been seeing some value that Mr. Morrison could talk  
16 about because he had some reports automated to keep track of all the auto-  
17 flushers they had out there and how they were operating.

18 Mr. Morrison said that this had been an incredible tool. He said that  
19 he personally had three reports that he got every morning between 6:00 a.m.  
20 and 6:30 a.m., one was their automatic flushing assemblies. He said that Mr.  
21 Barrow's group was able to deploy the AMI on all those assemblies early, so  
22 it gave them real-time data that the assembly did correctly operate the day  
23 before, the programming changes were considered, the nodes, and they had  
24 no issues to address. He said that they used to check them once a week, so  
25 if there was an issue where a panel was unable to open or got stuck open,  
26 there could be significant consequences for that. He said that they also got  
27 a report for a group that covered all of the meters in Scottsville, as well as all  
28 of the meters for Red Hill. He said that those being smaller systems, a  
29 significant leak in a residential home could have pretty big impacts on the  
30 system as a whole. He said that being able to identify those quickly and in  
31 conjunction with what customer service was looking at allowed them to

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1 reduce the impacts to Rivanna, who was running the treatment plants there.  
2 He said that a good example was right after Christmas this year when they  
3 had the hard freeze, there was a leak that developed at a store in Scottsville  
4 that was closed and was flowing 22,000 gallons per day, essentially double  
5 the daily demand at Scottsville. He said they were able to quickly get down  
6 there and isolate the meter and contact the owners who had not been in the  
7 store to see this so they could reduce the damage that occurred there and  
8 work with that customer. He said that also with the smaller systems it helped  
9 their environmental department when looking at water quality. He said that  
10 the Red Hill system was a prime example in that when the elementary school  
11 was not in session there, the demand in that system dropped significantly,  
12 so they could monitor that daily demand and see if they needed to go down  
13 there and do any proactive flushing to ensure they had adequate chlorine  
14 residual levels and had no higher water age. He said that it was an incredibly  
15 great tool to have, and with the growth in the system, the AMI would help  
16 them that much more in the future.

17 Dr. Palmer asked if most of Scottsville was done.

18 Mr. Morrison said that all of Scottsville was on AMI.

19 Mr. Barrow said that it had been in for over a year.

20 Dr. Palmer asked if that was where they got a lot of leaks because  
21 the system was old.

22 Mr. Morrison said that it was not a high leak rate, but with it being a  
23 more remote part of their system, the ability to identify that quickly and  
24 communicate to customers if there was a response necessary to dispatch to  
25 employee to Scottsville helped them out.

26 Mr. Parcels said that he had asked a long time ago about fire  
27 hydrants, which he knows there are many. He said that he guessed that it  
28 was probably not economically viable, but he wondered if perhaps they were  
29 having second thoughts.

30 Mr. Lunsford said that they had not considered that yet. He said that  
31 their hydrant meter program was something that they were constantly talking

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1 about, trying to think about the best way to meet the needs and protect the  
2 system.

3 Mr. Parcels said that his understanding was that it would be very  
4 expensive to retrofit something like that. He said asked if water haulers,  
5 which were fewer in cases, were worth attaching meters to. He corrected  
6 himself and said they had a mechanical meter.

7 Mr. Lunsford said that one of the future items that would be added to  
8 the system is additional pressure recording devices, not on meters, but on  
9 pipes to detect leaks and things that were important for them to have. He  
10 said that the backbone was there and the structure was there.

11 Mr. Barrow said that they had been able to monitor the Glenmore  
12 water plant that was flushing a lot of water.

13 Mr. Lunsford said that was correct.

14  
15 10. Items Not on the Agenda

16 There were none.

17  
18  
19  
20 11. Adjourn

21 ***There being no further business, Mr. Parcels moved that the***  
22 ***meeting be adjourned, seconded by Mr. Tolbert. All members voted***  
23 ***aye.***

24  
25 \_\_\_\_\_  
Gary B. O'Connell, Secretary-Treasurer

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<b>AGENDA TITLE:</b> Monthly Financial Reports  <b>STAFF CONTACT/PREPARER:</b> Quin Lunsford, Director of Finance	<b>AGENDA DATE:</b> September 21, 2023  <b>ACTION:</b> Informational  <b>ATTACHMENTS:</b> Yes
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**BACKGROUND:** Water and sewer financial reports and check registers for the month of August are attached for your review.

**DISCUSSION:**

- Water consumption for the month of July decreased 5.5% compared to June. Water consumption for the month of July 2023 compared to July 2022 decreased 1.1%.
- RWSA's invoice of \$2,352,971 for the month of July was paid on August 7, 2023.
- Unearned water and sewer connection charges totaled \$1,371,471 at month end.
- System connection charges are below budgeted expectations with \$582,980 recognized in July. Total system connection charges for FY 2024 are less than those in FY 2023 by 30%.
- Water and Wastewater revenues for FY 2024 are above budgeted expectations by 10.6%. Please see the water/wastewater trend analysis included illustrating that when adjustment for expected variations in seasonal consumption are considered, revenues are 0.5% higher than budgeted expectations.
- Staff is working on closing Fiscal Year 2023 in conjunction with the year-end financial statement and compliance audit. Mr. Tolbert and Mr. Parcels have agreed to sit on the Audit Committee later this year to review the draft FY 2023 financial documents and reports from the auditors. A full presentation to the Board is scheduled for the November 16, 2023 meeting.
- In accordance with the ACSA's Board adopted Financial and Investment Policies, the ACSA transferred \$6,000,000 from the ACSA's operating account at Bank of America to the ACSA's Local Government Investment Pool (LGIP) account. The transfer leaves an adequate balance in the operating account to fulfill current needs and also leverage expected higher earnings through the LGIP.

**BUDGET IMPACT:** Informational only.

**RECOMMENDATIONS:** None

**BOARD ACTION REQUESTED:** None; informational item only.

**ALBEMARLE COUNTY SERVICE AUTHORITY****AGENDA ITEM EXECUTIVE SUMMARY****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

August 31, 2023

## ASSETS

Cash and cash equivalents	\$ 16,892,722
Accounts receivable	5,373,972
Investments	44,069,089
Capital assets: (net of accumulated depreciation)	180,522,777
Inventory	552,082
Prepays	-
Cash and cash equivalents, restricted	729,960
	<hr/>
Total assets	248,140,602
	<hr/>

## DEFERRED OUTFLOWS OF RESOURCES

Combined deferred outflows of resources	1,175,852
	<hr/>

## LIABILITIES

Accounts payable	5,326,784
Accrued liabilities	375,924
Compensated absences	746,495
Net pension liability	2,454,029
Other post-employment benefits	1,244,519
Unearned connection fees	1,371,471
Long-term debt	4,570,883
	<hr/>
Total liabilities	16,090,105
	<hr/>

## DEFERRED INFLOWS OF RESOURCES

Combined deferred inflows of resources	1,104,953
	<hr/>

## NET POSITION

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232,121,396

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ALBEMARLE COUNTY SERVICE AUTHORITY  
For the One Month Ending August 31, 2023

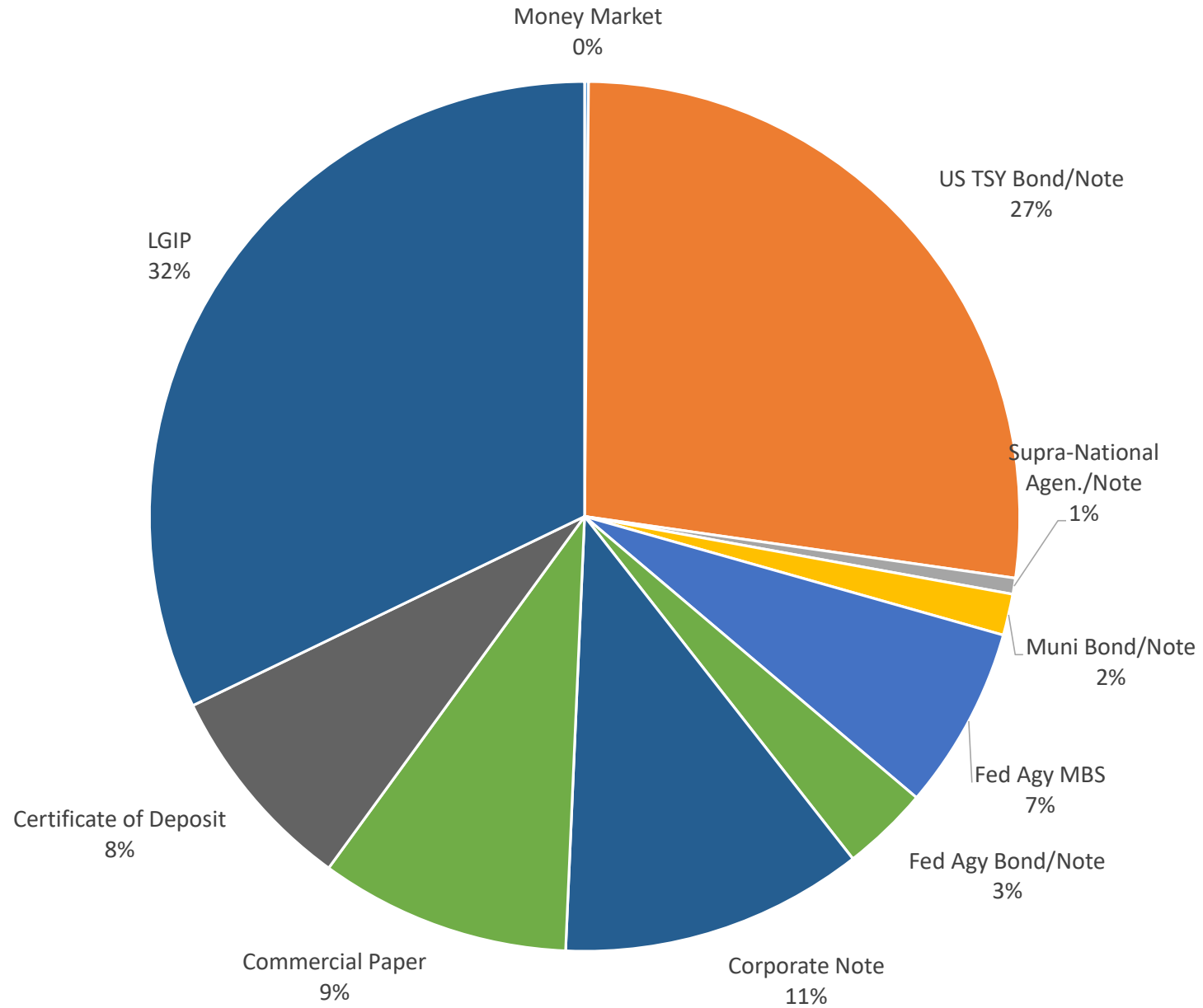
30

	Budget FY 2023	Budget Year-to-Date 2023	August Actual Year-to-Date	Actual vs. Budget	Variance Percentage
<b>Revenues</b>					
Water Sales	20,580,000.	3,430,000.	3,939,925.	509,925.	14.87%
Sewer Service	16,679,000.	2,779,833.	2,930,542.	150,709.	5.42%
<b>Total operating revenues</b>	<b>37,259,000.</b>	<b>6,209,833.</b>	<b>6,870,467.</b>	<b>660,634.</b>	<b>10.64% A</b>
<b>Operating Expenses</b>					
Purchase of bulk water	(16,256,000.)	(2,709,333.)	(2,810,436.)	(101,103.)	3.73% B
Purchase of sewer treatment	(11,689,000.)	(1,948,167.)	(1,896,834.)	51,333.	(2.63%) B
Administration	(1,475,500.)	(245,917.)	(191,687.)	54,230.	(22.05%) C
Finance	(2,890,000.)	(481,667.)	(413,359.)	68,308.	(14.18%) C
Information Technology	(1,787,600.)	(297,933.)	(365,672.)	(67,739.)	22.74% C
Engineering	(2,400,300.)	(400,050.)	(386,779.)	13,271.	(3.32%) C
Maintenance	(4,749,900.)	(791,650.)	(547,558.)	244,092.	(30.83%) C
<b>Total operating expenses</b>	<b>(41,248,300.)</b>	<b>(6,874,717.)</b>	<b>(6,612,325.)</b>	<b>262,392.</b>	<b>(3.82%)</b>
<b>Operating gain(loss)</b>	<b>(3,989,300.)</b>	<b>(664,883.)</b>	<b>258,142.</b>	<b>923,025.</b>	<b>(138.83%)</b>
<b>Nonoperating Revenues</b>					
System connection charges	8,000,000.	1,333,333.	1,690,475.	357,142.	26.79% D
Investment/Interest Income	600,000.	100,000.	421,813.	321,813.	321.81% E
Rental income	16,000.	2,667.	2,431.	(236.)	(8.84%)
Miscellaneous revenues	761,000.	126,833.	112,973.	(13,860.)	(10.93%) F
<b>Total nonoperating revenues (expenses)</b>	<b>9,377,000.</b>	<b>1,562,833.</b>	<b>2,227,692.</b>	<b>664,859.</b>	<b>42.54%</b>
<b>Nonoperating Expenses</b>					
Miscellaneous expenses	(327,300.)	(54,550.)	(2,461.)	52,089.	(95.49%) G
Bond interest charges	(183,859.)	(30,643.)		30,643.	(100.00%) H
Depreciation	0.	0.	(720,330.)	(720,330.)	0.00% I
<b>Total nonoperating revenues (expenses)</b>	<b>(511,159.)</b>	<b>(85,193.)</b>	<b>(722,791.)</b>	<b>(637,598.)</b>	<b>748.41%</b>
<b>Capital contributions</b>	<b>0.</b>	<b>0.</b>	<b>856,780.</b>	<b>856,780.</b>	<b>0.00%</b>
<b>Change in Net Position</b>	<b>4,876,541.</b>	<b>812,757.</b>	<b>2,619,823.</b>	<b>1,807,066.</b>	<b>222.34%</b>

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

- A.** Water and sewer revenues were more than budgeted amounts by 10.64%. Consumption through August (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 more than budgeted amounts by 1.07%. 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 with the exception of Information Technology which is slightly higher than budgeted expectations. Variations early in the fiscal year are expected as the timing of expenses can more greatly impact variances. Departmental expenses will continue to be monitored throughout the fiscal year and are expected to align with budgeted expectations.
- D.** System connection charges 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



## Portfolio Summary and Statistics

For the Month Ending **August 31, 2023**

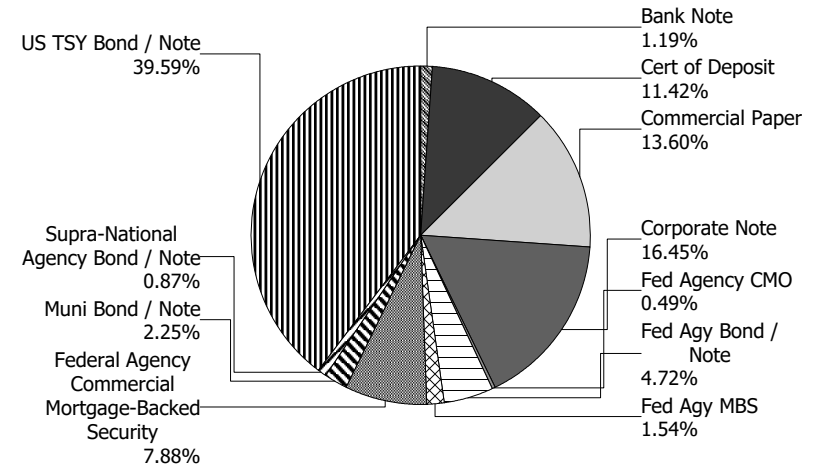
ACSA OPERATING FUNDS - 03100100

### Account Summary

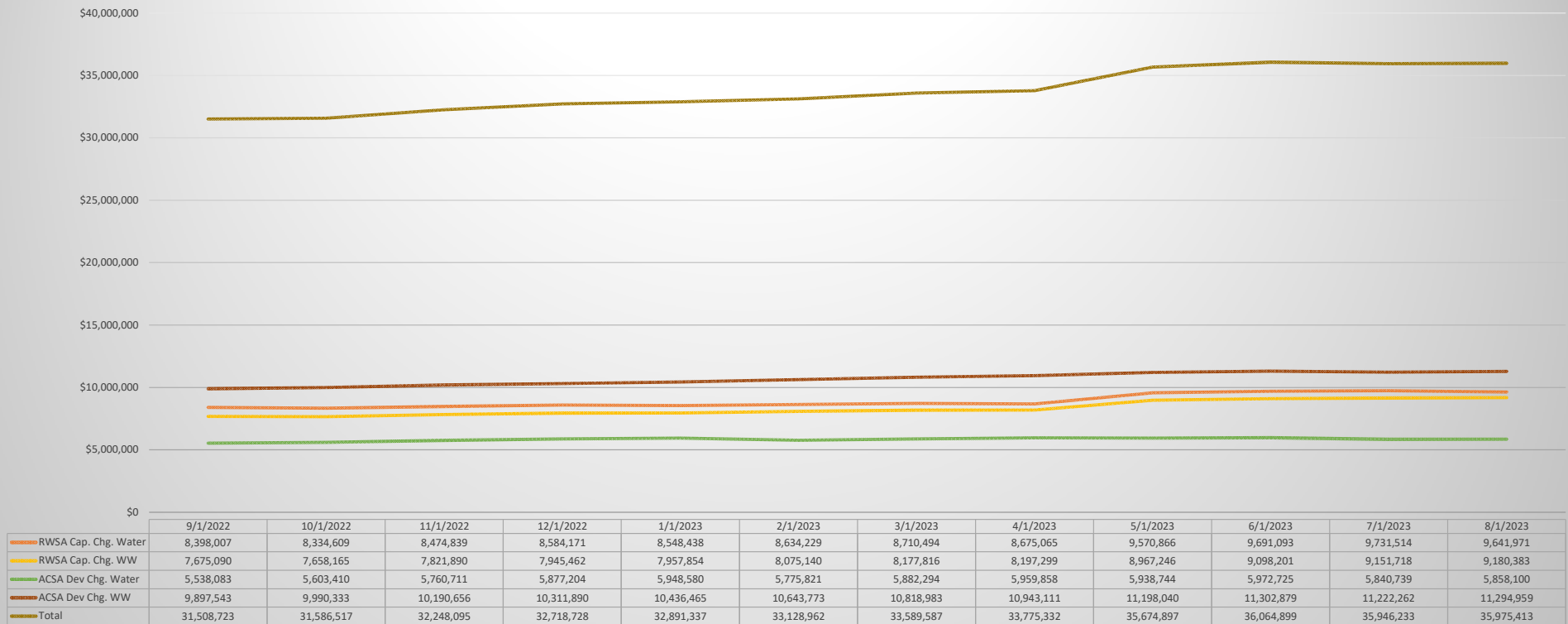
Description	Par Value	Market Value	Percent
U.S. Treasury Bond / Note	12,260,000.00	11,854,493.64	39.59
Supra-National Agency Bond / Note	265,000.00	261,848.36	0.87
Municipal Bond / Note	680,000.00	672,662.60	2.25
Federal Agency Mortgage-Backed Security	496,564.37	462,000.82	1.54
Federal Agency Commercial Mortgage-Backed Security	2,460,114.66	2,359,287.75	7.88
Federal Agency Collateralized Mortgage Obligation	150,000.00	146,453.95	0.49
Federal Agency Bond / Note	1,445,000.00	1,414,902.59	4.72
Corporate Note	5,060,000.00	4,925,222.25	16.45
Commercial Paper	4,200,000.00	4,073,359.20	13.60
Certificate of Deposit	3,425,000.00	3,419,884.01	11.42
Bank Note	355,000.00	355,942.17	1.19
<b>Managed Account Sub-Total</b>	<b>30,796,679.03</b>	<b>29,946,057.34</b>	<b>100.00%</b>
Accrued Interest		161,724.97	
<b>Total Portfolio</b>	<b>30,796,679.03</b>	<b>30,107,782.31</b>	

**Unsettled Trades** **0.00** **0.00**

### Sector Allocation



### Capacity/System Development Reserves



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**  
**July 2023**

Area	July 2023 Monthly Connection Fees	July 2022 Monthly Connection Fees	\$ Change	% Change
Crozet	\$ 283,830	\$ 107,760	\$ 176,070	163%
Urban	298,850	724,950	(426,100)	-59%
Scottsville	300	-	300	
<b>Total Connection fees</b>	<b>\$ 582,980</b>	<b>\$ 832,710</b>	<b>\$ (249,730)</b>	<b>-30%</b>
<b>Through July</b>				
Area	YTD FY 2024 Connection Fees	YTD FY 2023 Connection Fees	\$ Change	% Change
Crozet	\$ 283,830	\$ 107,760	\$ 176,070	163%
Urban	298,850	724,950	(426,100)	-59%
Scottsville	300	-	300	-
<b>Total Connection fees</b>	<b>\$ 582,980</b>	<b>\$ 832,710</b>	<b>\$ (249,730)</b>	<b>-30%</b>

Area	July 2023 ERC's	July 2022 ERC's	Change	% Change
Crozet	21	8	13	163%
Urban	22	54	(32)	-59%
Scottsville	-	-	-	-
<b>Total ERC's</b>	<b>43</b>	<b>62</b>	<b>(19)</b>	<b>-31%</b>
<b>Through July</b>				
Area	YTD FY 2024 ERC's	YTD FY 2023 ERC's	Change	% Change
Crozet	21	8	13	163%
Urban	22	54	(32)	-59%
Scottsville	-	-	-	-
<b>Total ERC's - YTD</b>	<b>43</b>	<b>62</b>	<b>(19)</b>	<b>-31%</b>

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  
July 2023**

<b>Area</b>	<b>July 2023 ERC's</b>	<b>July 2022 ERC's</b>	<b>July 2021 ERC's</b>
<b>Crozet</b>	21	8	7
<b>Urban</b>	22	54	18
<b>Scottsville</b>	-	-	-
<b>Total ERC's</b>	43	62	25

<b>Through July</b>			
<b>Area</b>	<b>YTD 2024 ERC's</b>	<b>YTD 2023 ERC's</b>	<b>YTD 2022 ERC's</b>
<b>Crozet</b>	21	8	7
<b>Urban</b>	22	54	18
<b>Scottsville</b>	-	-	-
<b>Total ERC's - YTD</b>	43	62	25

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, YTD ERCs in Fiscal Year 2023 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**

	<b>FY 2024</b>	<b>FY 2023</b>	<b>Increase</b>	
	<b>RWSA Charges</b>	<b>RWSA Charges</b>	<b>(Decrease)</b>	
<b>July</b>	\$ 2,352,971	\$ 2,041,957	\$ 311,014	15.23%
<b>August</b>	2,352,440	2,042,399	310,041	15.18%
<b>September</b>		2,083,284		
<b>October</b>		2,021,265		
<b>November</b>		1,987,793		
<b>December</b>		2,025,214		
<b>January</b>		1,990,411		
<b>February</b>		1,956,978		
<b>March</b>		2,006,071		
<b>April</b>		2,013,296		
<b>May</b>		2,021,900		
<b>June</b>		1,979,565		
	<hr/>	<hr/>		
	\$ 4,705,411	\$ 24,170,133		
<hr/>				
<b>YTD</b>	\$ 4,705,411	\$ 4,084,356	\$ 621,054	15.21%

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

**Albemarle County Service Authority  
Consumption Analysis  
Fiscal Year 2024**

	FY 2024 Consumption	FY 2023 Consumption		Monthly Precipitation (In.)	
				FY 2024	FY 2023
July	154,300,020	155,932,214	-1.05%	5.44	6.42
August		159,969,362	-100.00%		4.10
September		155,676,979	-100.00%		2.79
October		152,513,014	-100.00%		2.24
November		148,761,821	-100.00%		4.52
December		134,997,083	-100.00%		4.60
January		138,803,649	-100.00%		2.32
February		126,909,570	-100.00%		2.87
March		134,395,216	-100.00%		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
	154,300,020	1,752,137,549		5.44	43.01

YTD	154,300,020	155,932,214	-1.05%	5.44	6.42
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**Note:** Consumption through July 2023 is 1.05% less 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>.



## Water and Sewer Report

(Volumes in Gallons)

July 2023

Billed by Area:	Water	Sewer
Crozet	17,187,790	15,184,516
Scottsville	1,252,359	763,951
Urban	135,835,442	111,758,079
Red Hill	24,429	0
<b>Total</b>	<b>154,300,020</b>	<b>127,706,546</b>

Billing by Sewer Plant:	
AWT	126,942,595
less Glenmore	(4,028,004)
Urban Total	122,914,591
Scottsville	763,951
<b>Total</b>	<b>123,678,542</b>

Number of Installed Meters:	
Urban	42
Crozet	20
Scottsville	0
<b>Total</b>	<b>62</b>

Metered Consumption (billed by invoice):	
Urban	1,792,400
Crozet	41,400
Scottsville	0
<b>Total</b>	<b>1,833,800</b>

Unmetered Consumption:	
ACSA Fire Flow Consump.	Urban 14,220
<b>Total</b>	<b>14,220</b>

Unmetered Leak Consumption:	
7/4/23 Caitlyn Drive	Crozet 2000
7/6/23 2750 Olde Oak Court	Urban 500
7/13/23 Whitewood Road	Urban 5000
7/21/23 Woodburn Road	Urban 5000
7/24/23 Dellwood Road	Urban 1000
<b>Total</b>	<b>13,500</b>

### Billed Consumption for Selected Customers

	Water	Sewer
*Virginia Land Holding	346,732	346,732
Southwood Mobile Homes	1,716,770	2,310,000
Turtle Creek Apts.	1,219,554	1,218,744
Barracks West Apartments	1,343,601	1,343,601
Monroe Health and Rehab	1,242,308	1,242,308
Sunrise Senior "Colonnades"	870,149	712,549
ACRJ	882,100	750,100
Westminster Canterbury	1,472,340	1,392,340
SEMF Charleston	1,632,747	1,632,747
Martha Jefferson Hospital	2,341,938	1,200,838
Crozet Mobile Home Court	281,400	281,400
The Home Depot	157,600	157,600
County of Albemarle	1,444,323	612,602
University of Virginia	2,115,343	2,109,522
Wegmans	342,378	342,378

	Water	Sewer
Boar's Head Inn	657,314	607,656
Farmington, Inc.	1,162,896	518,792
Westgate Apts.	1,150,741	1,148,541
Abbingdon Crossing	1,968,136	1,968,136
Four Seasons Apts	1,470,206	1,470,206
Ch'ville/Alb Airport	204,545	205,082
State Farm	1,302,200	1,183,007
Hyatt @ Stonefield	386,166	386,166
Doubletree	939,420	939,420
Arden Place Apts.	468,991	468,991
Hilton Garden Inn	274,771	246,475
The Blake @ Charlottesville	355,329	355,329
The Lodge @ Old Trail	241,844	241,844
Gov't-Defense Complex	1,215,535	1,156,688
Harris Teeter Stores	198,174	198,174

\* Indicates Industrial Discharge Permit Holders

## WATER

Class Type	Number of Connections by Area			Total
	Urban	Crozet	Scottsville	
Single-Family Residential	16,001	3,844	195	20,040
Multi-Family Residential	565	43	3	611
Commercial (Offices)	202	12	5	219
Commercial (Other)	932	76	53	1,061
Industrial	36	11	4	51
Institutional	171	32	12	215
Total Water Accounts	17,907	4,018	272	22,197
Plus Multiple Units	13,130	748	89	13,967
Total Water Units	31,037	4,766	361	36,164

## SEWER

Class Type	Number of Connections by Area			Total
	Urban	Crozet	Scottsville	
Single-Family Residential	13,689	3,568	157	17,414
Multi-Family Residential	534	41	4	579
Commercial (Offices)	186	12	5	203
Commercial (Other)	725	52	44	821
Industrial	15	5	1	21
Institutional	133	26	10	169
Total Sewer Accounts	15,282	3,704	221	19,207
Plus Multiple Units	12,714	744	56	13,514
Total Sewer Units	27,996	4,448	277	32,721

## 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	72,828	11,480	710	85,018
Total Sewer Customers	66,008	10,780	533	77,320

**Albemarle County Service Authority  
Major Customer Analysis  
July 2023 and June 2023**

	<b>July 2023</b>		<b>June 2023</b>		<b>Increase(Decrease)</b>	<b>Increase(Decrease)</b>
	<b>Water*</b>	<b>Sewer*</b>	<b>Water*</b>	<b>Sewer*</b>	<b>Water Consumption</b>	<b>Sewer Usage</b>
University of Virginia	2,115,343	2,109,522	1,485,252	1,482,876	42.42%	42.26%
Martha Jefferson Hospital	2,341,938	1,200,838	2,096,485	1,226,101	11.71%	-2.06%
ACRJ	882,100	750,100	886,200	784,200	-0.46%	-4.35%
Westmisnster Canterbury	1,472,340	1,392,340	1,527,400	1,446,400	-3.60%	-3.74%
Abbingtion Crossing	1,968,136	1,968,136	2,135,337	2,135,337	-7.83%	-7.83%
Turtle Creek Apts.	1,219,554	1,218,744	1,332,485	1,331,685	-8.48%	-8.48%
Barracks West Apartments	1,343,601	1,343,601	1,496,296	1,496,296	-10.20%	-10.20%
Westgate Apts.	1,150,741	1,148,541	1,288,861	1,288,861	-10.72%	-10.89%
Four Seasons Apts.	1,470,206	1,470,206	1,663,832	1,663,832	-11.64%	-11.64%
Southwood Mobile Homes	1,716,770	2,310,000	1,985,070	1,930,000	-13.52%	19.69%
SEMF Charleston	1,632,747	1,632,747	1,992,721	1,992,721	-18.06%	-18.06%
County of Albemarle	1,444,323	612,602	2,447,135	1,283,129	-40.98%	-52.26%

**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  
July 2023 and July 2022**

	July 2023		July 2022		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
County of Albemarle	1,444,323	612,602	926,547	699,426	55.88%	-12.41%
Turtle Creek Apts.	1,219,554	1,218,744	1,085,764	1,080,664	12.32%	12.78%
SEMF Charleston	1,632,747	1,632,747	1,464,801	1,464,801	11.47%	11.47%
Abbingtion Crossing	1,968,136	1,968,136	1,926,166	1,926,166	2.18%	2.18%
Martha Jefferson Hospital	2,341,938	1,200,838	2,376,936	965,595	-1.47%	24.36%
Westmisnster Canterbury	1,472,340	1,392,340	1,554,690	1,439,690	-5.30%	-3.29%
Four Seasons Apts.	1,470,206	1,470,206	1,568,221	1,568,221	-6.25%	-6.25%
Westgate Apts.	1,150,741	1,148,541	1,232,893	1,229,593	-6.66%	-6.59%
University of Virginia	2,115,343	2,109,522	2,386,957	2,380,598	-11.38%	-11.39%
Barracks West Apartments	1,343,601	1,343,601	1,525,400	1,525,400	-11.92%	-11.92%
ACRJ	882,100	750,100	1,020,280	853,280	-13.54%	-12.09%
Southwood Mobile Homes	1,716,770	2,310,000	2,039,000	2,100,000	-15.80%	10.00%

**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 -- July**

	YTD FY 2024		YTD FY 2023		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
<b>County of Albemarle</b>	1,444,323	612,602	926,547	699,426	55.88%	-12.41%
<b>Turtle Creek Apts.</b>	1,219,554	1,218,744	1,085,764	1,080,664	12.32%	12.78%
<b>SEMF Charleston</b>	1,632,747	1,632,747	1,464,801	1,464,801	11.47%	11.47%
<b>Abbington Crossing</b>	1,968,136	1,968,136	1,926,166	1,926,166	2.18%	2.18%
<b>Martha Jefferson Hospital</b>	2,341,938	1,200,838	2,376,936	965,595	-1.47%	24.36%
<b>Westmisnster Canterbury</b>	1,472,340	1,392,340	1,554,690	1,439,690	-5.30%	-3.29%
<b>Four Seasons Apts.</b>	1,470,206	1,470,206	1,568,221	1,568,221	-6.25%	-6.25%
<b>Westgate Apts.</b>	1,150,741	1,148,541	1,232,893	1,229,593	-6.66%	-6.59%
<b>University of Virginia</b>	2,115,343	2,109,522	2,386,957	2,380,598	-11.38%	-11.39%
<b>Barracks West Apartments</b>	1,343,601	1,343,601	1,525,400	1,525,400	-11.92%	-11.92%
<b>ACRJ</b>	882,100	750,100	1,020,280	853,280	-13.54%	-12.09%
<b>Southwood Mobile Homes</b>	1,716,770	2,310,000	2,039,000	2,100,000	-15.80%	10.00%

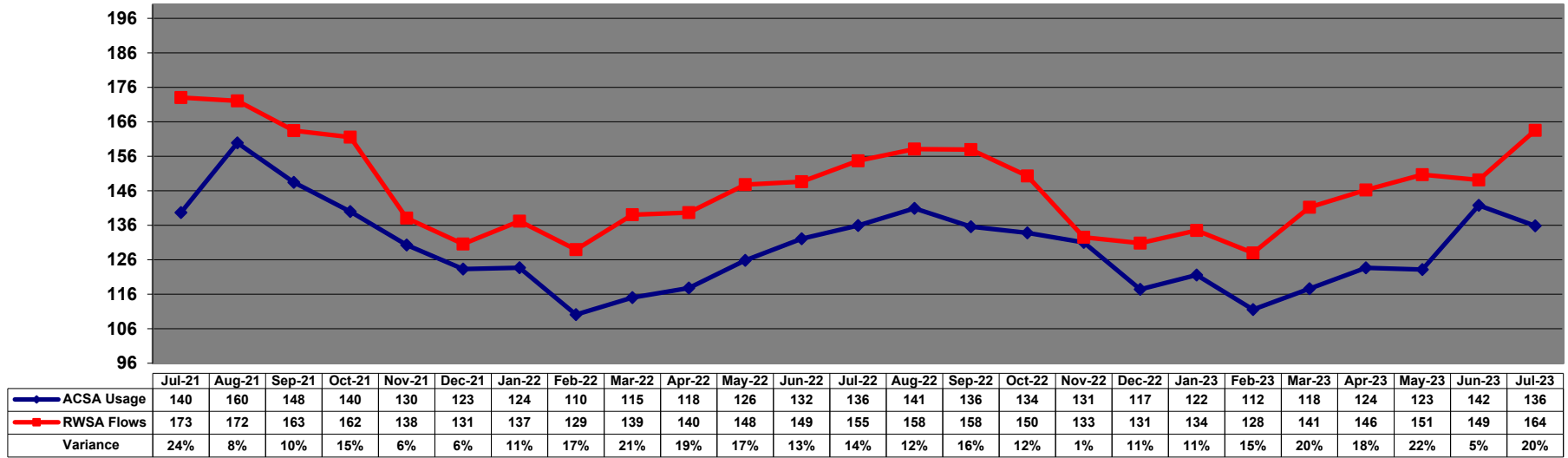
**Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion,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

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

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

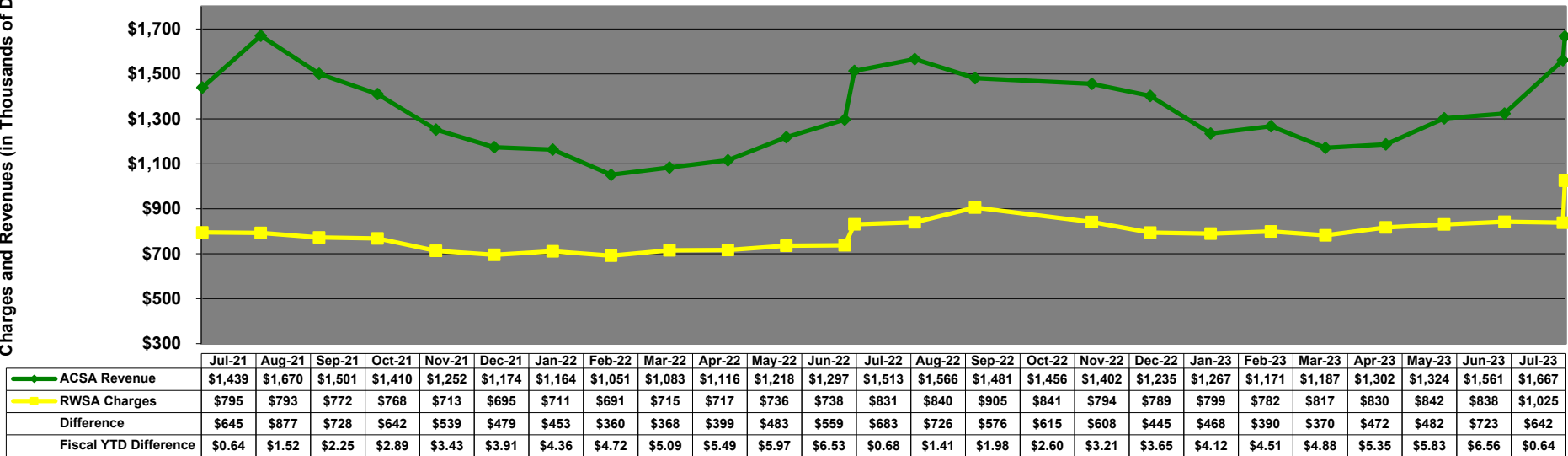
44

Flows & Usage (in Millions of Gallons)



Charges and Revenues (in Thousands of Dollars)

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

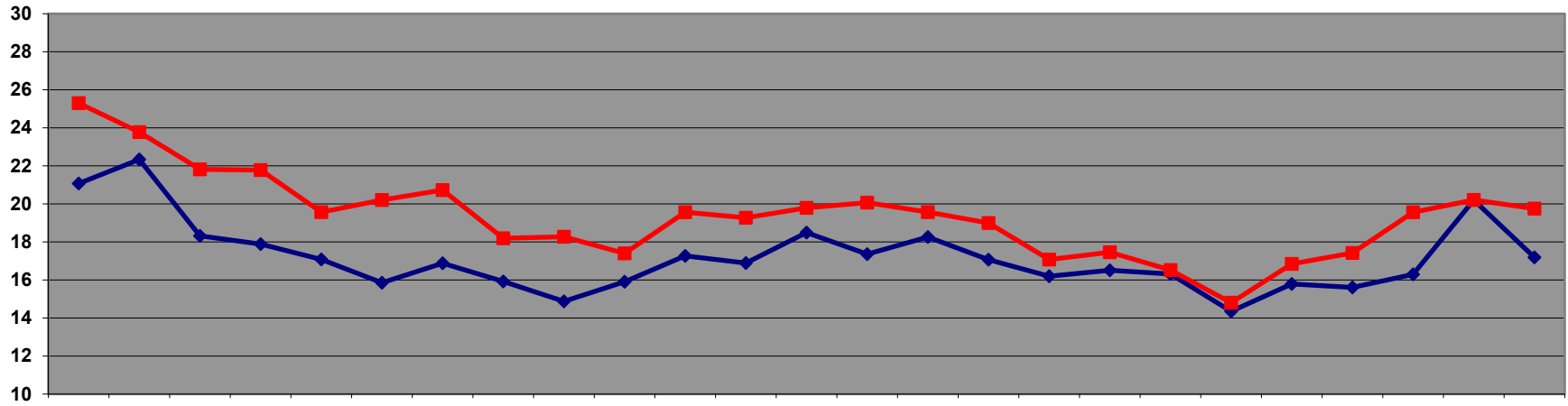


Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

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

45

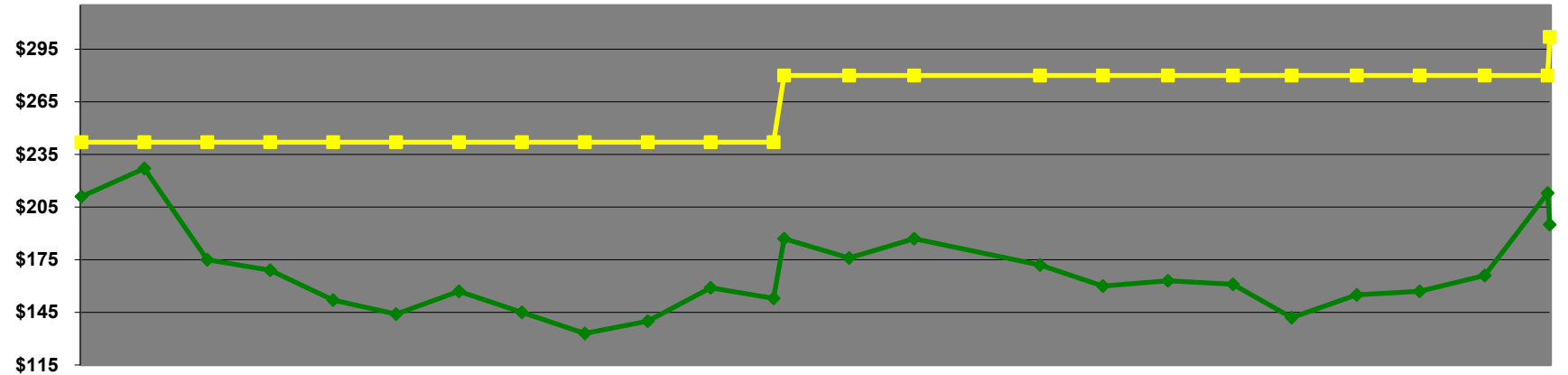
Flows & Usage (in Millions of Gallons)



	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
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
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
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%

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

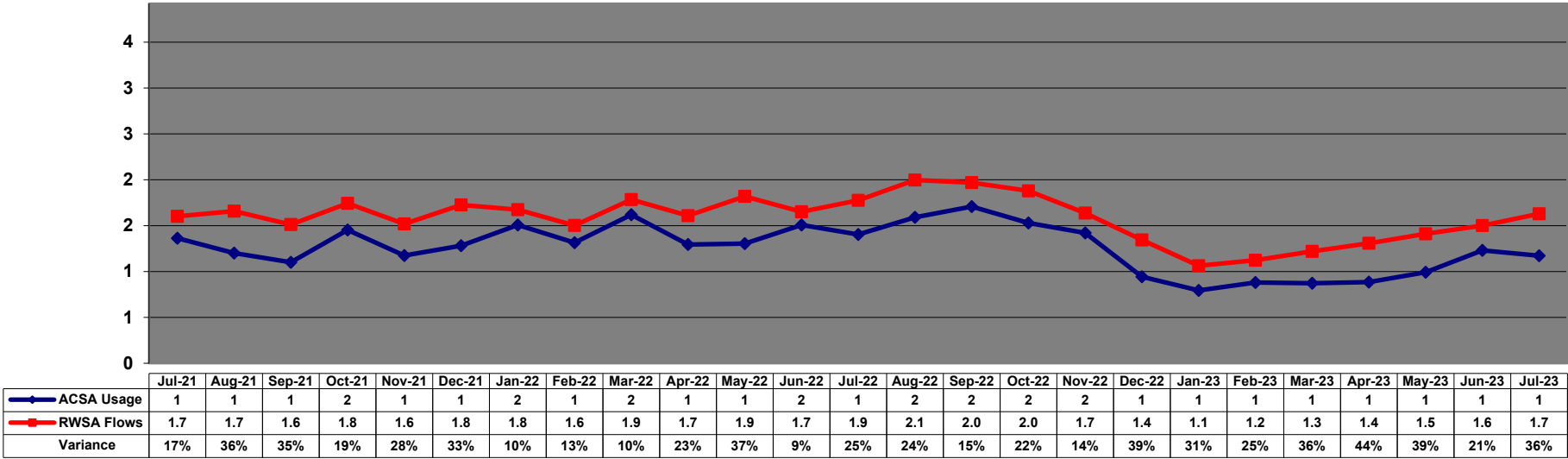
Charges and Revenues (in Thousands of Dollars)



	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
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
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
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)
Fiscal YTD Difference	-\$0.03	(\$0.05)	(\$0.11)	(\$0.19)	(\$0.28)	(\$0.37)	(\$0.46)	(\$0.56)	(\$0.67)	(\$0.77)	(\$0.85)	(\$0.94)	(\$0.09)	(\$0.20)	(\$0.29)	(\$0.40)	(\$0.52)	(\$0.64)	(\$0.75)	(\$0.89)	(\$1.02)	(\$1.14)	(\$1.25)	(\$1.32)	(\$0.11)

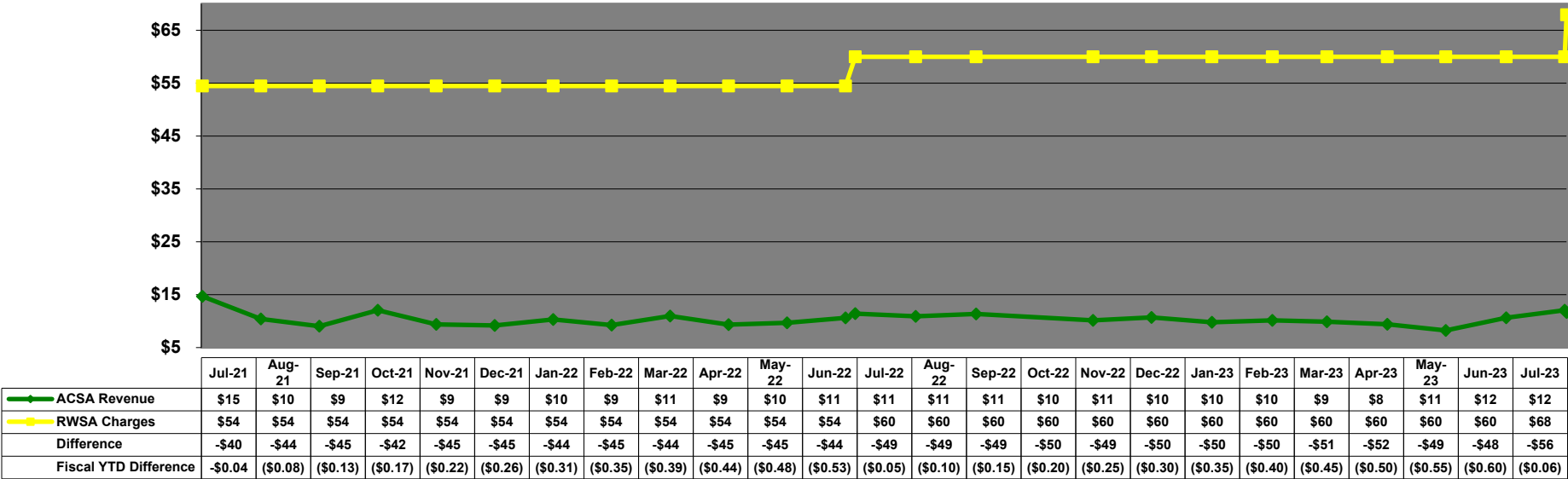
FY 2022, 2023, and 2024 Scottsville Water Comparison  
RWSA Flows & ACSA Customer Usage

Flows & Usage (in Millions of Gallons)



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

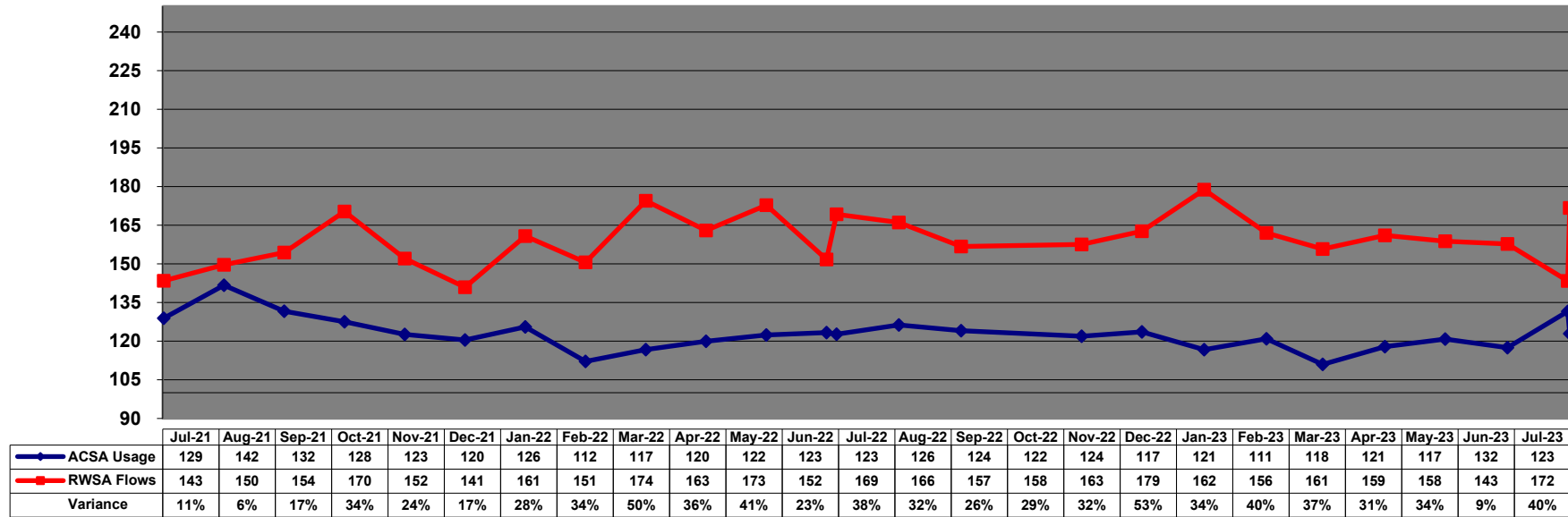
Charges and Revenues (in Thousands of Dollars)



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

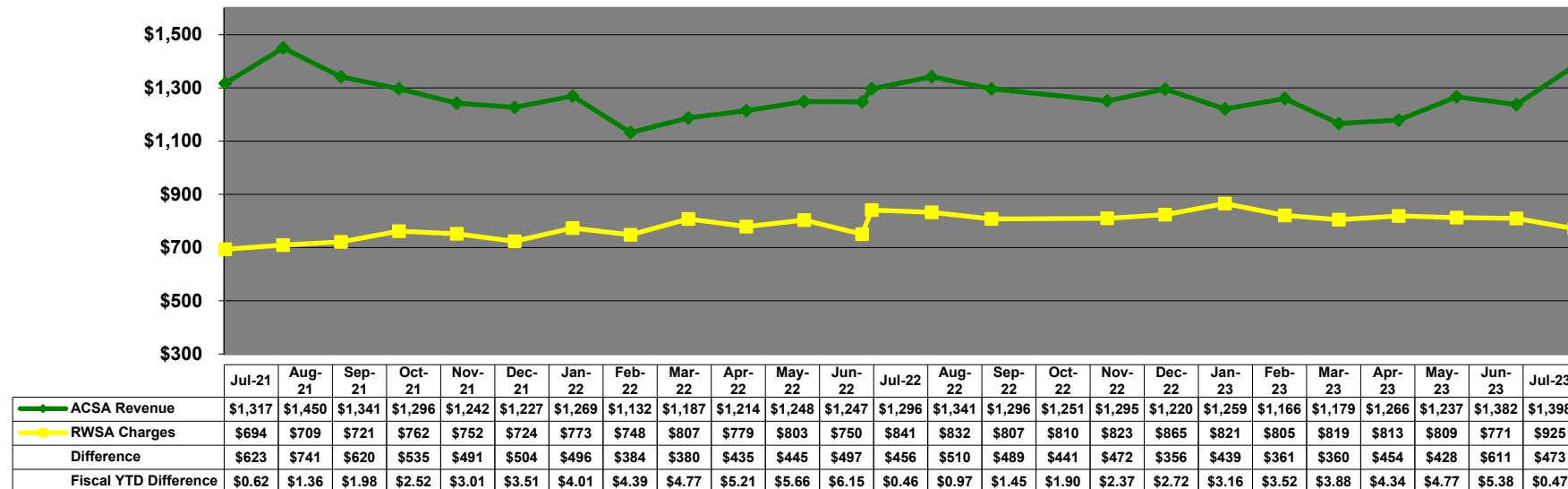
47

Usage & Flows (in Millions of Gallons)



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

Charges & Revenues (in Thousands of Dollars)

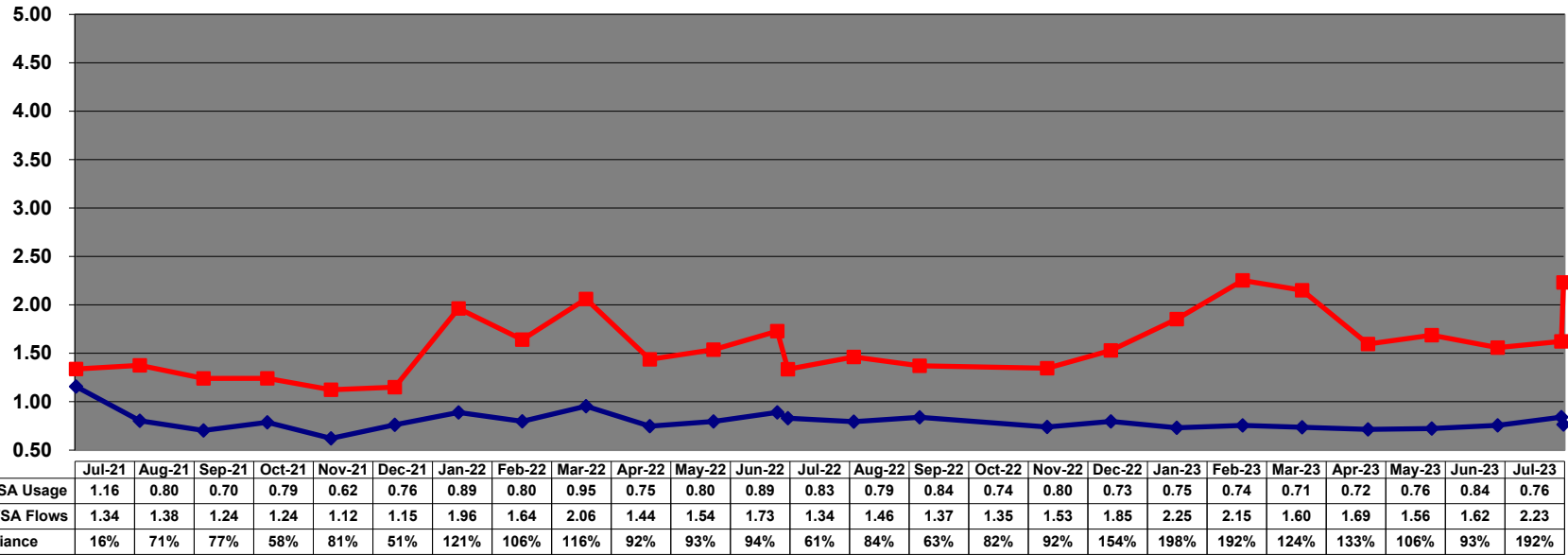


Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

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

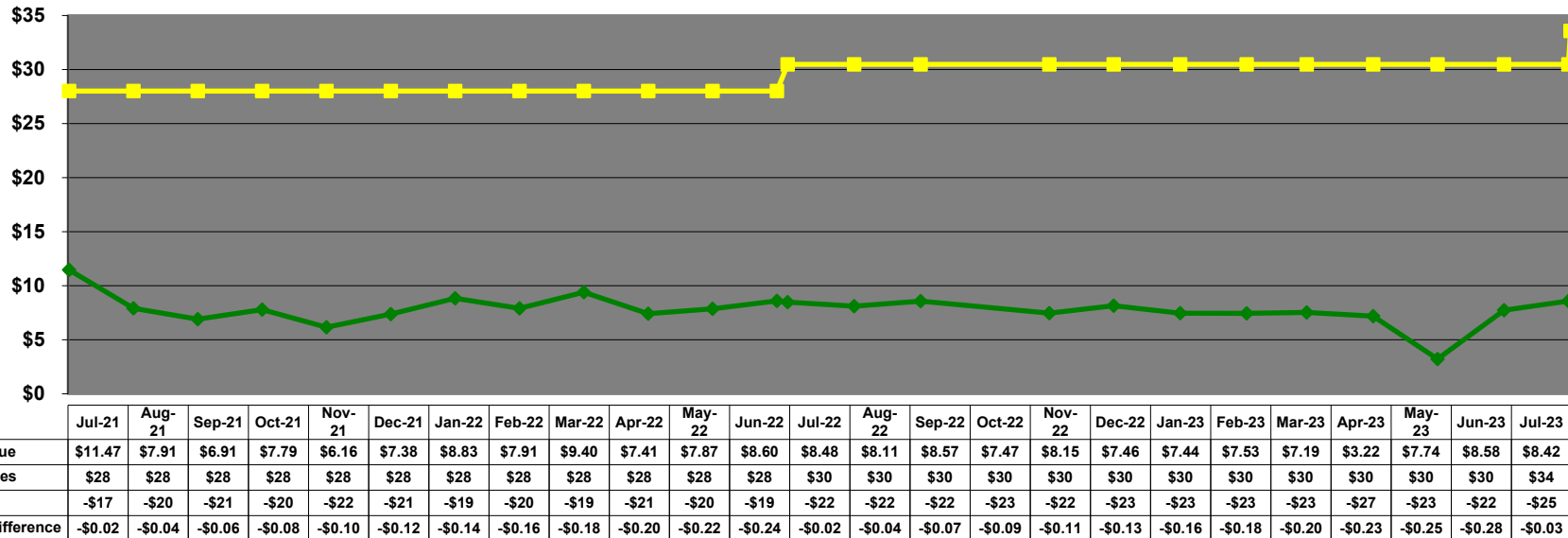
48

Usage & Flows (in Millions of Gallons)



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

Charges & Revenues (in Thousands of Dollars)

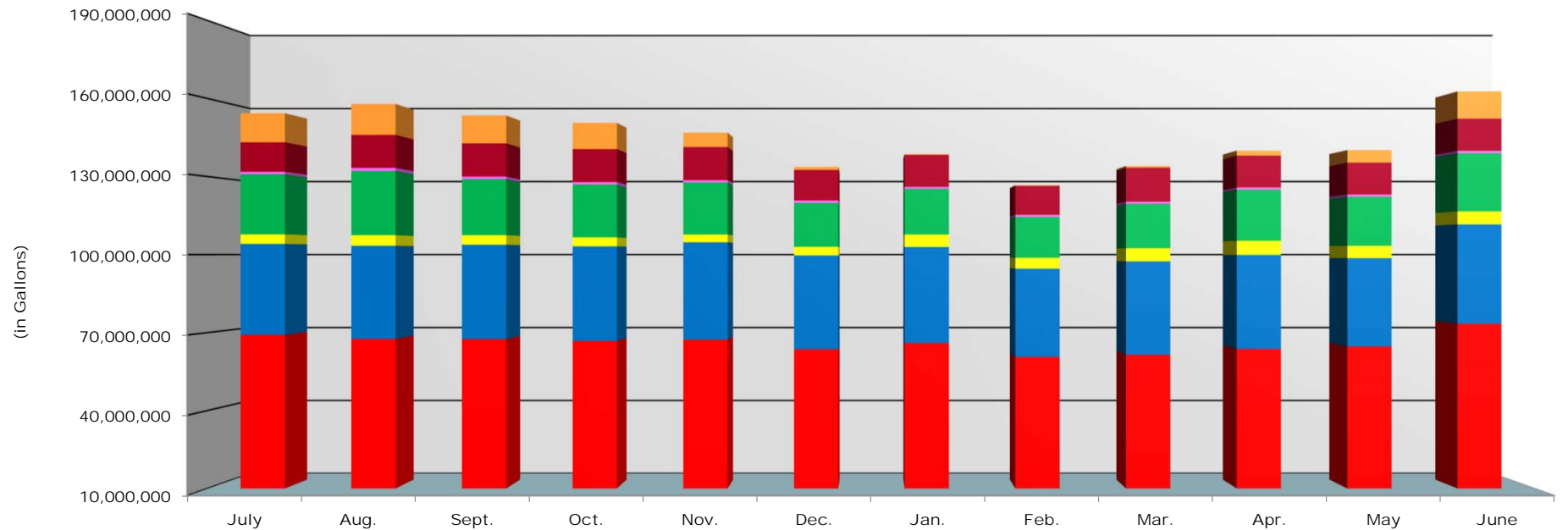


Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

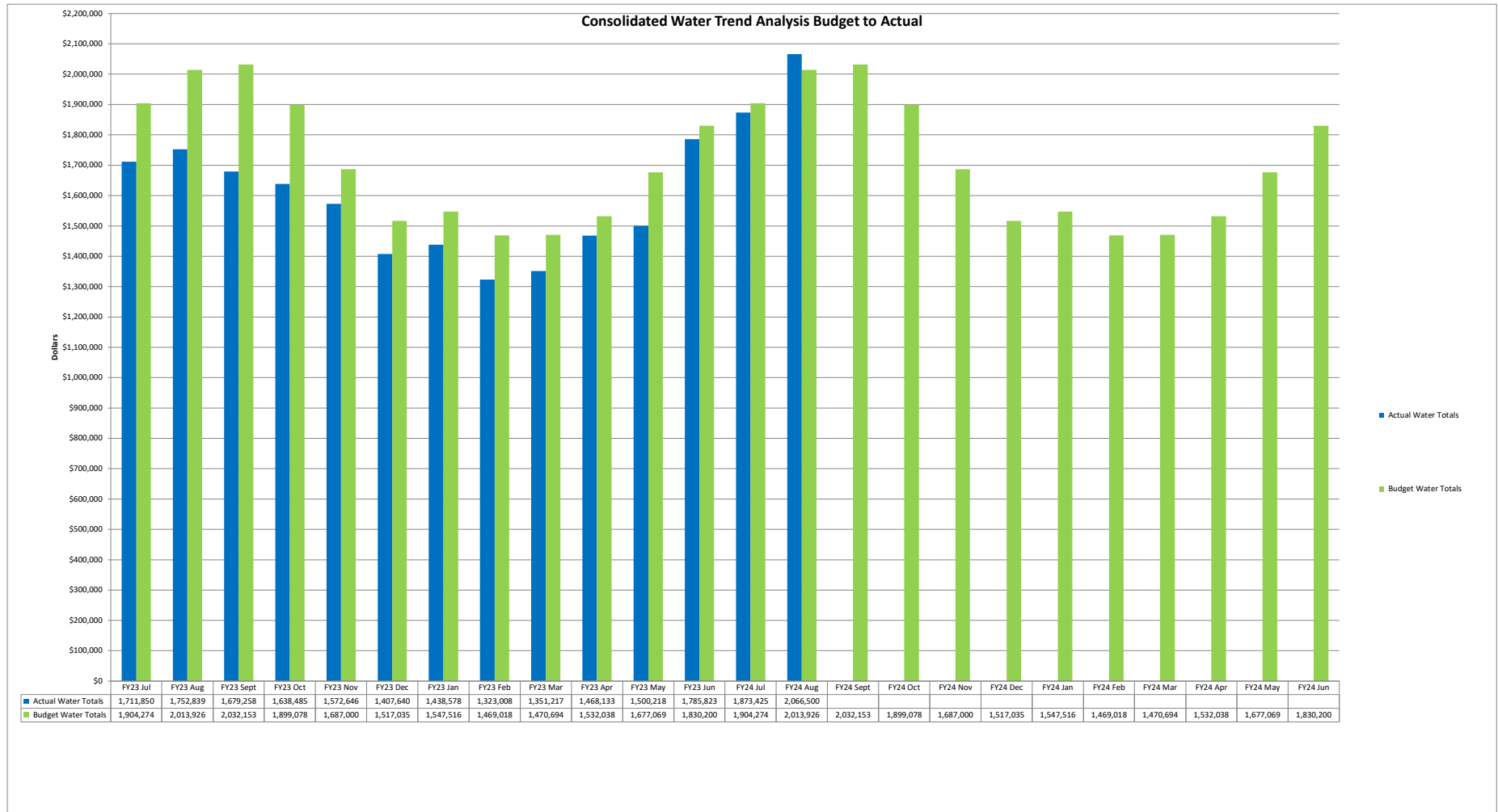


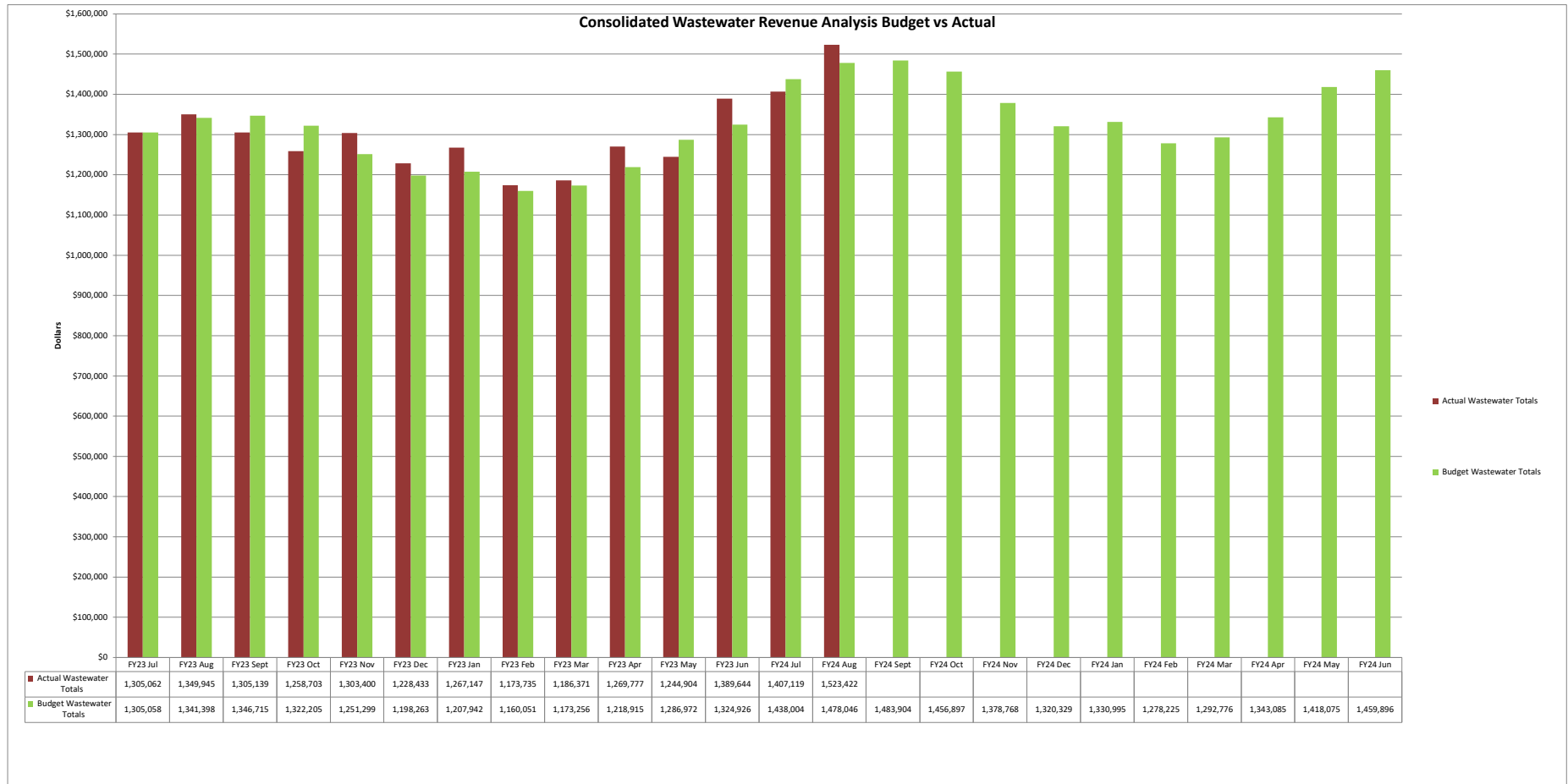


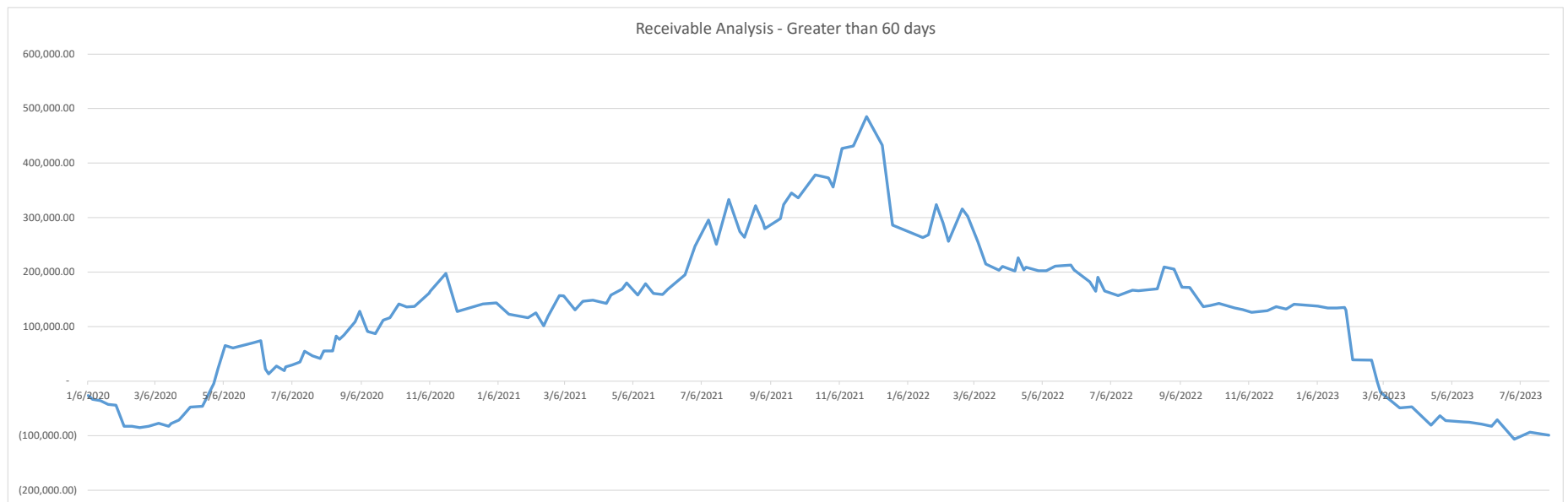
Monthly Water Consumption Fiscal Year 2023



	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







**Albemarle County Service Authority**

**August 2023 Payments**

<b>CHECK NUMBER</b>	<b>CHECK DATE</b>	<b>VENDOR NAME</b>	<b>AMOUNT</b>	<b>DESCRIPTION OVER \$5,000</b>
Wire	08/07/2023	Rivanna Water & Sewer Authority	2,352,970.82	Bulk Water & Sewer Treatment
66646	08/01/2023	Core & Main LP	258,757.93	AMI
	08/15/2023	Payroll	164,641.78	Net Pay
	08/31/2023	Payroll	164,449.78	Net Pay
66715	08/01/2023	Whitman, Requardt & Assoc LLP	96,394.63	Scottsville Phase 4 Design
66632	08/01/2023	Anderson Construction Inc	94,525.52	Madison Park Pump Station
479838155	08/15/2023	IRS - Federal Tax Deposit	63,520.66	Payroll
480688656	08/31/2023	IRS - Federal Tax Deposit	62,840.55	Payroll
Wire	08/21/2023	The Bank of New York Mellon	43,288.40	Debt Service
480688660	08/31/2023	County of Albemarle	36,673.08	Payroll
479838254	08/31/2023	County of Albemarle	33,321.00	Payroll
479838251	08/31/2023	Virginia Retirement System	31,473.87	Payroll
480688661	08/31/2023	Virginia Retirement System	31,473.80	Payroll
66654	08/01/2023	East Coast Utility Contractors	25,650.00	Sewer Pump Station
66650	08/01/2023	Dewberry Engineers Incorporated	22,583.83	Townwood Water Main
66739	08/15/2023	Fortiline Incorporated	22,231.95	Inventory - Lid Meter
66783	08/15/2023	Virginia Department of Health	16,611.00	Waterworks Operation Fee
66679	08/01/2023	OW Investors LLC	16,558.11	Supplies, Memberships, Tools
66662	08/01/2023	AGILIS LLC	15,867.17	4 Story Res Backflow Phases 2&3
66741	08/15/2023	Greenwood Homes	13,670.00	Refund Connections Fees
66723	08/15/2023	Bank of America	11,011.64	Supplies, Memberships, Tools
479838256	08/15/2023	Virginia Dept of Taxation	10,652.72	Payroll
480688657	08/31/2023	Virginia Dept of Taxation	10,565.12	Payroll
66729	08/15/2023	County of Albemarle	9,467.04	800 MHz Radio System
66784	08/15/2023	Cellco Partnership	7,568.68	Monthly Cellular Service
66734	08/15/2023	E Source Companies LLC	7,090.00	AMI Project - Phase 3
66756	08/15/2023	Mansfield Oil Company of Gainesville	6,911.44	Monthly Fuel Charge
66700	08/01/2023	RSG Landscaping LLC	5,142.19	Landscaping
479838253	08/15/2023	Valic	5,115.80	Payroll
480688655	08/31/2023	Valic	5,035.00	Payroll
479838250	08/15/2023	Nationwide	4,354.65	
480688653	08/31/2023	Nationwide	4,354.65	
66732	08/15/2023	Dominion Energy Virginia	4,224.60	
66678	08/01/2023	Mansfield Oil Company of Gainesville	3,944.67	
66675	08/01/2023	L/B Water Service Incorporated	3,804.66	
66776	08/15/2023	The El Group Incorporated	3,800.00	
66655	08/01/2023	Ed's Floor Care Services LLC	3,703.33	
66651	08/01/2023	Dixon Engineering Incorporated	3,570.00	
66658	08/01/2023	EWT Holdings III Corporation	3,569.83	
479838249	08/15/2023	ICMA Membership Renewals	3,321.06	
480688652	08/31/2023	ICMA Membership Renewals	3,321.06	
66653	08/01/2023	Dominion Energy Virginia	3,061.73	
66685	08/01/2023	Ramboll Americas Engineering	2,976.21	
66693	08/01/2023	PFM Asset Management LLC	2,918.24	
66724	08/15/2023	C'Ville & Albemarle Cnty Chamber of	2,900.00	
66752	08/15/2023	Lowe's	2,734.59	
66682	08/01/2023	Michael Baker International Inc	2,585.96	
66754	08/15/2023	Mailing Services of Virginia	2,288.40	
66780	08/15/2023	UniFirst Corporation	2,181.85	
66709	08/01/2023	UniFirst Corporation	2,074.58	
66667	08/01/2023	Hawkins-Graves Incorporated	1,973.53	
66738	08/15/2023	Flora Pettit PC	1,960.00	

66737	08/15/2023	Ferguson US Holdings Inc	1,895.78
66695	08/01/2023	Rappahannock Electric Co-Op	1,870.34
66771	08/15/2023	Rivanna Water & Sewer Authority	1,859.70
67816	08/31/2023	Minnesota Life Insurance Co	1,827.34
66664	08/01/2023	Fortiline Incorporated	1,805.13
66694	08/01/2023	Pinnacle Construction	1,716.19
67813	08/31/2023	Guardian	1,689.98
66728	08/15/2023	Comcast	1,669.68
66772	08/15/2023	RSG Landscaping LLC	1,614.03
479838248	08/15/2023	ACSA Flexible Spending	1,588.65
480688659	08/31/2023	ACSA Flexible Spending	1,588.65
66701	08/01/2023	S L Williamson Company Inc	1,530.15
66731	08/15/2023	Cues Incorporated	1,467.73
66677	08/01/2023	Mailing Services of Virginia	1,444.00
66785	08/15/2023	VA Utility Protection Service Inc	1,432.20
479838247	08/15/2023	Flexible Benefit	1,427.00
480688658	08/31/2023	Flexible Benefit	1,427.00
67811	08/31/2023	ACAC	1,205.00
66628	08/01/2023	Carsons LLC	1,123.83
66642	08/01/2023	C.E.S (City Electric Accounts - Chi)	927.38
66629	08/01/2023	Albemarle Lock & Safe Company	912.00
66710	08/01/2023	University Tire & Auto	901.96
66767	08/15/2023	Republic Services	833.24
66770	08/15/2023	Rivanna Solid Waste Authority	827.00
66687	08/01/2023	ODP Business Solutions LLC	813.77
479838252	08/31/2023	AFLAC	758.47
480688654	08/31/2023	AFLAC	758.47
66676	08/01/2023	Luck Stone Corporation	745.80
66751	08/15/2023	Lee Enterprises Incorporated	727.50
66750	08/15/2023	LB Technology Incorporated	700.00
66712	08/01/2023	VACORP	668.39
66711	08/01/2023	UVA-WorkMed	660.00
66635	08/01/2023	Aqua Air Laboratories Inc	650.00
66645	08/01/2023	Comcast	643.44
66782	08/15/2023	Virginia Rural Water Association	600.00
66781	08/15/2023	HD Supply Facilities Maint LTD	599.52
66735	08/15/2023	Faulconer Construction	590.00
66775	08/15/2023	Macro Retailing LLC	584.94
66686	08/01/2023	Tim O'Donnell	578.56
66696	08/01/2023	Red Wing Brands of	577.18
66733	08/15/2023	DPR Construction	555.98
66648	08/01/2023	Crown Castle	530.45
66704	08/01/2023	SnowKnows Incorporated	519.92
66666	08/01/2023	Hathaway Solutions LLC	441.51
66656	08/01/2023	Peter Ellis	426.82
67819	08/31/2023	Treasurer of Virginia	419.84
66787	08/15/2023	Treasurer of Virginia	398.40
66765	08/15/2023	Pitney Bowes Inc.	398.37
66669	08/01/2023	Wisconsin Quick Lube Inc	376.13
67817	08/31/2023	Piedmont Family YMCA	370.80
66726	08/15/2023	BRC Enterprises Incorporated	369.00
66714	08/01/2023	Protocol SSD Corporation	357.00
66638	08/01/2023	George Bloom	351.82
66639	08/01/2023	Brink's Incorporated	310.59
66720	08/15/2023	Shannon Jenkins	300.00

66762	08/15/2023	Christine Stutsman	300.00
66707	08/01/2023	Technirain Irrigation LLC	298.30
66779	08/15/2023	U. S. Bank	291.67
66673	08/01/2023	Seng B Lahtaw	286.85
66717	08/01/2023	Sara Witt	284.48
66769	08/15/2023	Ricoh USA Incorporated	275.00
66634	08/01/2023	Appalachian Power	267.13
66703	08/01/2023	Shreckhise Brothers Incorporated	266.00
66627	08/01/2023	Advance Stores Company Inc	264.52
66633	08/01/2023	John Anglin	254.65
66660	08/01/2023	FedEx	254.25
66713	08/01/2023	Van Der Linde Homes	230.15
66630	08/01/2023	David A Payne	217.70
66719	08/15/2023	Advance Stores Company Inc	212.53
66671	08/01/2023	Meghana Keshavan	210.42
66745	08/15/2023	Hawkins-Graves Incorporated	203.63
66691	08/01/2023	Mitchell Thomas	200.00
66722	08/15/2023	Aqua Air Laboratories Inc	200.00
66718	08/01/2023	Joey Wu	191.28
66683	08/01/2023	Kara Nichols	180.64
66764	08/15/2023	Performance Signs LLC	180.00
66674	08/01/2023	Brenda Langdon	168.48
66661	08/01/2023	Flexible Benefit Administrators Inc	151.25
66746	08/15/2023	Marijean Oldham	150.00
66631	08/01/2023	James Alouf	146.16
66697	08/01/2023	Red Wing Business Advantage Accou	143.49
66716	08/01/2023	William A Wells	140.00
66705	08/01/2023	CM Turf	136.00
66759	08/15/2023	MSB Coach	135.00
67815	08/31/2023	Herbert Beskin Trustee	135.00
66748	08/15/2023	Wisconsin Quick Lube Inc	132.86
66698	08/01/2023	Rexel USA Incorporated	126.83
67818	08/31/2023	Snap Fitness	119.88
66721	08/15/2023	American Pest Incorporated	118.00
66657	08/01/2023	Jill Esquivel	110.96
66740	08/15/2023	Michelle Getter	101.56
66668	08/01/2023	Vaughn Haynes	100.66
66702	08/01/2023	Ameer Shammari	100.46
66692	08/01/2023	Shu-Chen Chen	100.00
66659	08/01/2023	Joyce Farley	99.58
66684	08/01/2023	Jamie Null	98.08
66636	08/01/2023	Atlantic Machinery Incorporated	97.41
66761	08/15/2023	Brandon Gibson	90.00
66760	08/15/2023	ODP Business Solutions LLC	89.56
66753	08/15/2023	Luck Stone Corporation	85.50
66774	08/15/2023	Stony Point Development Group	77.47
66755	08/15/2023	Malloy Ford	72.96
66763	08/15/2023	Debra Owens	70.42
66747	08/15/2023	James River Communications Inc	70.00
66786	08/15/2023	William A Wells	70.00
66758	08/15/2023	Mary McCaskill	69.96
66652	08/01/2023	Document Destruction of	69.95
66680	08/01/2023	Edward Martin	69.69
66708	08/01/2023	Commonwealth of Virginia DPOR	65.00
67814	08/31/2023	The Gym	65.00

66641	08/01/2023	Kirk Childers	62.29
66706	08/01/2023	Jennie Taylor	58.65
66681	08/01/2023	Suzanne McDonald	58.62
66672	08/01/2023	Marissa Kopatic	58.21
66647	08/01/2023	Cove Creek Industries Inc	56.00
66730	08/15/2023	Cove Creek Industries Inc	56.00
66777	08/15/2023	TSRC Incorporated	52.22
66644	08/01/2023	Clear Communication &	51.00
66773	08/15/2023	Dean Sanford	50.74
66689	08/01/2023	Levi Stauffer	43.90
66766	08/15/2023	Mark Planting	43.27
66742	08/15/2023	Kathleen Hajek	42.26
66757	08/15/2023	Martin Hardware Company Inc	41.52
66749	08/15/2023	Price Chevrolet Company	40.00
67812	08/31/2023	Anytime Fitness-Pantops	40.00
66768	08/15/2023	Rexel USA Incorporated	37.77
66744	08/15/2023	Hathaway Solutions LLC	37.56
66736	08/15/2023	FedEx	36.41
66699	08/01/2023	Jens Rodsten	36.20
66725	08/15/2023	Central Virginia Electric Co-Op	35.06
66688	08/01/2023	Leonard Lohman	30.00
66690	08/01/2023	Mary Parente	30.00
66643	08/01/2023	City of Charlottesville	27.16
66670	08/01/2023	Lisa Jones	26.27
66640	08/01/2023	MWP Supply Incorporated	22.10
66665	08/01/2023	Melissa Greenspon	20.30
66637	08/01/2023	Ethan Beard	18.38
66663	08/01/2023	Dorothy Forbes	17.70
66649	08/01/2023	Nina Cullers	13.09
66727	08/15/2023	City of Charlottesville	11.90
66778	08/15/2023	Thryv Incorporated	6.50
66743	08/15/2023	Hasbrouck Management	3.12
			<hr/>
			3,776,864.31

**ALBEMARLE COUNTY SERVICE AUTHORITY****AGENDA ITEM EXECUTIVE SUMMARY**

<b>AGENDA TITLE:</b> FY 2024 Capital Improvement Program (CIP) Report  <b>STAFF CONTACT(S)/PREPARER:</b> Jeremy M. Lynn, P.E., Director of Engineering	<b>AGENDA DATE:</b> September 21, 2023  <b>CONSENT AGENDA:</b>  <b>ACTION:</b> ■ <b>INFORMATION:</b> ■  <b>ATTACHMENTS:</b> 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**  
**September 2023**

**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:	0%
Contractor:	Undetermined
Construction Start:	October 2023
Completion:	2025
Total Budget:	\$6,534,400
Appropriated Funds:	\$588,156

**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.

**9/12/2023:** On September 6, 2023, three bids were received for the Crozet Phase 4 Water Main Replacement Project. Baker is in the process of checking references for the apparent low bidder, and we anticipate presenting an authorization to the Board at the October Meeting.

**2. Scottsville Phase 4 Water Main Replacement (Account Code 1758):**

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:	\$499,410

**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.

**9/12/2023: Comments on the 90% Design Documents will be returned to WRA before the end of September 2023.**

**3. Ragged Mountain Phase 1 Water Main Replacement (Account Code 1760):**

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	90%
Contractor:	Undetermined
Construction Start:	Undetermined
Completion:	Undetermined
Total Budget:	\$1,218,400
Appropriated Funds:	\$203,614

**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.

**9/12/2023: Geotechnical boring information has been provided to Dewberry and they have begun efforts in preparing the Draft Technical Memorandum, which will explore four alternatives to cross Morey Creek.**

**4. Northfields Water Main Replacement (Account Code 1764):**

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Design
Percent Complete:	50%
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.

**9/12/2023: Ramboll is developing the 90% Design Documents and is scheduled to submit those to the ACSA before the end of September 2023.**

**5. Huntington Village Water Connection (Account Code 1770):**

Consultant:	ACSA Engineering Department
Project Status:	Design
Percent Complete:	100%
Contractor:	Undetermined
Construction Start:	2024
Completion:	2024

Total Budget:	\$60,700
Appropriated Funds:	\$3,533

**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.

8/9/2023: The 100% Design Documents have been completed by ACSA staff. Construction for this project will take place following award of the upcoming Annual Water Services Contract that is nearing design completion.

#### **6. Briarwood Water Main Replacement (Account Code 1766):**

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Design
Percent Complete:	50%
Contractor:	Undetermined
Construction Start:	2026
Completion:	2027
Total Budget:	\$2,220,000
Appropriated Funds:	\$255,338

**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.

8/9/2023: ACSA staff have provided comments on the revised geotechnical boring plan prepared by Ramboll. Ramboll is transitioning to a new project manager, and they are working on the 90% Design Documents.

#### **7. Barracks West Water Main Replacement (Account Code 1796):**

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	90%
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.

**9/12/2023: Comments on the 90% Design Documents and draft easement plat will be provided to Dewberry this week.**

**8. Townwood Water Main Replacement (Account Code 1773):**

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	50%
Contractor:	Undetermined
Construction Start:	2028
Completion:	2028
Total Budget:	\$1,300,000
Appropriated Funds:	\$169,180

**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.

**9/12/2023: ACSA staff met with a Townwood HOA representative on August 9, 2023, to introduce the project. ACSA staff will be performing a site walk-thru the week of September 11, 2023, prior to returning comments on the 50% 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:	\$128,000

**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.

**9/12/2023: ACSA and County staff met on August 23, 2023, to discuss the County's status of their Broadway Blueprint initiative, with no conflicts anticipated between the two projects. ACSA staff have identified the need to acquire one easement along Broadway Street, and we have begun the process of contacting the property owner.**

**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.

8/9/2023: With construction currently scheduled for FY 2027 and FY 2028, ACSA staff have strategically identified this project as one to put in hold until we have made significant progress on higher priority projects. ACSA staff has received the 50% Design Documents from Baker.

#### **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:	\$7,125

**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.

**9/12/2023: The Lewis Hill HOA has indicated a preference for the ACSA to follow the alternative route that requires them granting a new easement. They have indicated their desire to have a third-party appraiser determine the value of the easement, so they are in the process of having the easement appraised.**

#### **12. Exclusion Meters Replacement (Account Code 1759):**

Consultant:	ACSA Engineering Department
Project Status:	Construction
Percent Complete:	40%
Contractor:	ACSA Maintenance Department
Construction Start:	September 2019
Completion:	2024
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 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.

**9/12/2023:** ACSA Maintenance crews have completed all remaining exclusion meter switchovers in the Darby Road (west) section of Glenmore. Crews anticipate remobilizing in early October 2023 to conduct follow-up restoration activities during more favorable weather conditions. This restoration schedule has been communicated to the community through an ACSA letter shared by the HOA. There are currently 296 private irrigation exclusion meters remaining in our system.

## **Sewer System CIP Projects**

### **13. Sewer Pump Station Comminutors (Account Code 1827):**

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction
Percent Complete:	100%
Contractor:	East Coast Utility Contractors, Ltd. (ECUC)
Construction Start:	July 2022
Completion:	September 2023
Total Budget:	\$731,300
Appropriated Funds:	\$616,193

**Project Description:** Three sewer pump stations: Glenmore, Georgetown Green, and Crozet have all experienced higher than normal amounts of solid debris that have caused undue wear and tear on our pumps, reducing their effective life. They have also been subjected to clogging from the fibrous cloth wipes that are marketed as flushable but do not break down in the sanitary sewer collection system. Maintenance identified the need to install comminutors (aka grinders) in the wet wells or just upstream of them, to eliminate these solids that are adversely impacting our pumps.

**9/12/2023:** ECUC has begun submitting the necessary closeout documents to the ACSA for review. WRA is currently in the process of reviewing O&M manuals provided by ECUC.

#### **14. Madison Park Pump Station Upgrade (Account Code 1735):**

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction
Percent Complete:	0%
Contractor:	Anderson Construction, Inc. (ACI)
Construction Start:	October 2022
Completion:	November 2023
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.

**9/12/2023: WRA recently returned the pump skid submittal indicating *Revise and Resubmit*, requiring a fifth submission. The issues with the submittal related to the responsible party of several electrical and wiring components inside the panel.**

#### **15. Airport Trunk Sewer Upgrade (Account Code 1828):**

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.

**8/9/2023:** The private development team has shared the ACSA's current design drawings with multiple contractors to obtain feedback on any construction challenges and to better understand the financial impacts. To date, 8 of 24 easements have been obtained.

**16. Bellair – Liberty Hills Sewer (Account Code 1829):**

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.

8/9/2023: ACSA staff is working with Baker to revise the design to minimize the areas within the neighborhood that will be served by E/One systems. ACSA staff is discussing how to best deploy E/One systems on an ACSA project.

**17. Biscuit Run Sewer Replacement (Account Code 1830):**

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	0%
Contractor:	Undetermined
Construction Start:	2024
Completion:	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.

**9/12/2023: ACSA staff is working on bid documents to advertise for construction this fall.**

**18. FY 2024 Miscellaneous Sewer Rehabilitation (Account Code 1908):**

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.

**9/12/2023:** Work Order No. 1 was issued August 11, 2023, and includes CCTV inspection of approximately 1,900 linear feet, CIPP relining of approximately 660 linear feet, and rehabilitation of five manholes. Work Order No. 2 was issued August 18, 2023, and includes installation of a segmental liner along 5<sup>th</sup> Street Extended due to damage caused by a geotechnical boring contractor. Work Order No. 3 was issued September 1, 2023, and includes a sewer point repair along Commonwealth Drive due to damage caused by the installation of an electrical line. Work Order No. 3 was completed on September 5, 2023. The ACSA will be reimbursed by the responsible parties for costs associated with Work Order No.'s 2 and 3.



## **Non-Utility and Facility CIP Projects**

### **19. Risk Assessment Improvements (Account Code 1621):**

Consultant: Dewberry Engineers, Inc. (Dewberry)  
 Project Status: Construction  
 Percent Complete: 95%  
 Contractor: Harrisonburg Construction Co., Inc. (HCC)  
 Construction Start: November 2022  
 Completion: September 2023  
 Total Budget: \$1,221,950  
 Appropriated Funds: \$1,222,048

**Project Description:** This project focuses on implementation of recommendations from our Vulnerability Assessment that was completed in conjunction with our community partners, which identified mitigation measures to lower risks and increase resiliency for the ACSA. Priority 1 improvements focus on fencing and door hardening at existing tank and pump station sites. Priority 2 focuses on the creation of sterile zones around various sites. Priorities 3 and 4

focus on installation of new fencing and lightening protection. Some mitigation measures have already been completed with others phased over upcoming fiscal years based upon priority.

**9/12/2023: Delivery of the final security doors has been delayed. HCC anticipates beginning installation efforts before the end of September 2023.**

**20. ESRI ArcGIS Utility Network Implementation Study (Account Code 1628):**

Consultant:	Timmons Group
Project Status:	Study
Percent Complete:	0%
Project Start:	September 2023
Completion:	March 2024
Total Budget:	\$225,000
Appropriated Funds:	\$45,228

**Project Description:** The software vendor for the ACSA's Geographic Information System (GIS) has released a product called Utility Network which could enable additional functionality that would benefit ACSA staff. Implementing this software would entail a major change to the structure of the GIS as well as how it is accessed, maintained, modified, and updated going forward. It also would impact all integrated software. This study will determine if a migration is possible due to the various integrations and processes currently in place. The study will weigh the benefits with the consequences of implementing the software. It will also determine what changes would be necessary to the GIS before the data is in a format which can be migrated into the Utility Network.

**9/12/2023: The contract with Timmons Group has been finalized. The kick-off meeting was held on September 12, 2023, and the study is now underway. Discovery meetings will occur throughout the next month.**

**21. Energy Audit (Account Code 1625):**

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	0%
Contractor:	ACSA Facilities Group
Construction Start:	July 2023
Completion:	October 2023
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.

**9/12/2023: The replacement domestic water heater at the Spotnap Facility has arrived and installation is anticipated before the end of September 2023.**



## **22. Avon Operations Center (Account Code 1622):**

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	95%
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.

**9/12/2023:** Dewberry is in the process of addressing minor comments on the three easement plats.

**23. ACSA – Fire Suppression System Replacement (Account Code 1631):**

Consultant:	Undetermined
Project Status:	Study
Percent Complete:	0%
Construction Start:	2024
Completion:	2024
Total Budget:	\$750,000
Appropriated Funds:	\$0

**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.

**9/12/2023:** The Request for Qualifications (RFQ) for pre-qualification has been advertised with a deadline of September 26, 2023. A Pre-Submission Conference was held on September 6, 2023, with several interested firms in attendance.

**24. Records Management Project (Account Code 1632):**

Consultant:	Right Fit Consulting
Project Status:	Study
Percent Complete:	0%
Study Start:	September 2023
Completion:	December 2023
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.

**9/12/2023:** The Scope of Work for Data Classification Services has been executed and a kick-off meeting is anticipated the week of September 18, 2023.

**25. Four-Story Backflow Prevention Assembly Retrofit (Account Code 1765):**

Consultant:	ACSA/Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	84%
Contractor:	Foothill Irrigation

Construction Start:	February 2023
Completion:	October 2023
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.

**9/12/2023:** Foothill Irrigation recently completed three installations on Saturday, September 9, 2023, and has another scheduled for September 14, 2023. There are currently 7 assemblies remaining to be installed.



## **26. SCADA System Phase 3 (Account Code 1605):**

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction
Percent Complete:	25%
Contractor:	M.C. Dean
Construction Start:	November 2022
Completion:	December 2023
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.

**9/12/2023:** M.C. Dean has met with the electrical service providers at each of the sites and has received approved electrical permits for all sites except for Northfields. Most of the sites have had concrete pads prepared with the pours scheduled for the week of September 11, 2023. M.C. Dean began installation efforts at the Forest Lakes North PRV on September 12, 2023.




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**Albemarle County Service Authority (ACSA)**  
**Active Private Development Projects**  
**September 2023**

- a. Albemarle Business Campus – Block 1 (Scottsville): Water and sewer main extensions to serve 128 multi-family units. The site is located to the northeast of the Old Lynchburg Road and Country Green Road intersection.
- b. Belvedere Phase 5B (Rio): Water and sewer main extensions to serve 20 single family homes at the end of Fowler Street in the back of Belvedere.
- c. Brookhill Blocks 9-11 (Rivanna): Water and sewer main extensions to serve 85 single family homes in the Brookhill subdivision, located east of Stella Lane between Ashwood Boulevard and Archer Avenue.
- d. 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.
- e. 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.
- f. HTC Area C Townhomes Block III (Rio): Sewer extension and water services to serve 10 attached single family units. The site is located near the intersection of Timberwood Boulevard and Lockwood Drive.
- g. 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.
- h. Mountain View Elementary Building Addition (Scottsville): Water main extension to facilitate building addition.
- i. North Pointe Apartments (Rivanna): Water main extension and a sewer connection to serve 279 multifamily units and a clubhouse. The project is located at the intersection of Northside Drive and Cliffstone Boulevard.
- j. 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.

- k. Pleasant Green – Phase 2B and 3 (White Hall): Water and sewer main extensions to serve 173 residential units. This project is located to the southeast of the Orchard Acres subdivision.
- l. Regents School of Charlottesville (Samuel Miller): Water and sewer main extensions to serve a private school, grades K-12. The site is located west of Trinity Presbyterian Church, along Reservoir Road.
- m. 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.
- n. Scottsville Tiger Fuel (Scottsville): Water service and sewer main extension to serve a gas station. This project is located to the south of the Scottsville Road and James River Road intersection.
- o. Southwood Phase 1 – Blocks 9-11 (Scottsville): Water and sewer main extensions to serve 70 single family units and 16 condominium units. This project is located west of Horizon Road and south of Hickory Street.
- p. Southwood Redevelopment Village 2 (Scottsville): Water and sewer main extensions to serve 44 single family units and 4 condominium units. This project is located near the southern terminus of Horizon Road, on the south side of Hickory Street.
- q. Stonefield Block D1 (Jack Jouett): Water main extension to serve a 220 unit apartment building at the intersection of Inglewood Drive and Bond Street.
- r. 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.

## AGENDA ITEM EXECUTIVE SUMMARY

<b>AGENDA TITLE:</b> Rivanna Water & Sewer Authority (RWSA) Monthly Update <b>STAFF CONTACT(S)/PREPARER:</b> Gary O'Connell, Executive Director 	<b>AGENDA DATE:</b> September 21, 2023 <b>CONSENT AGENDA:</b> Informational <b>ATTACHMENTS:</b> No
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**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 August 27<sup>th</sup> RWSA Board Meeting and other communications.

RWSA Board Meeting and other Updates and Approvals at the August 27<sup>th</sup> Board Meeting:

- **Operational Presentations:** With several new Board members, the RWSA staff did overviews of two operational areas: (1) Urban Water Supply Plan and Demand Review, and (2) Wastewater Facilities Review. No new information was provided, this all a “refresher.” If any of the Board would like a copy, I can get you an electronic version of the PowerPoints.
- **Ragged Mountain Dam Agreement Status:** This agreement draft is being discussed by the four (City, County, RWSA, and ACSA) Attorneys to agree to a 12-foot raise of the reservoir level at Ragged Mountain. Tied to that are minimum instream flows to protect the Moorman’s River flows. An extension of the lease agreement between RWSA and the City is included in this discussion. Further updates coming as this draft moves on from attorneys.
- **RWSA FY’23 Operation Budget Ended in a Deficit:** The RWSA year ended in an overall net deficit of \$1.5 million, or 3.5% above the annual budget of \$41.8 million. Total revenues are \$1.9 million over budget (6%), and expense overages are a result of projects, IT related expenses, dramatic (+60%) cost increases for chemicals, and unbudgeted repair costs. A final tally of the revenues and expenses will be presented to the Board at the September meeting. Reserves are available to cover the overages. We will need to review the current budget for any needed adjustments.

**RWSA Major Capital Project Updates:**

RWSA continues to work with UVA to acquire the final easements on the following major water piping projects:

## AGENDA ITEM EXECUTIVE SUMMARY

1. South Fork Rivanna to Ragged Mountain Reservoir Water Pipe - 8 miles of 36" pipe:

Status: Negotiations with UVAF have been completed. Details are being finalized for the documents before signatures.

2. Ragged Mountain Reservoir to Observatory WTP Water Pipe and Pump Station - 5 miles of 36" pipe:

Status: Rivanna's coordinating with UVA on an alternate pipeline alignment north of Fontaine Avenue to avoid a potential conflict with a cemetery.

3. Central Water Line - 5 miles of 24" and 36" water pipe primarily along Cherry Avenue:

Status: Engineering plans and specifications are at the 90% stage of completion. Construction is expected to begin in December 2024, extended due to delivery of pipe reportedly taking 6-9 months. An extensive communication effort will be completed with the communities adjacent to the project before construction begins. Efforts to obtain easements are underway.

- **South Rivanna and Observatory Water Treatment Plant Renovations**

Design Engineer:	Short Elliot Hendrickson, Inc. (SEH)
Construction Contractor:	English Construction Company
Construction Start:	May 2020
Percent Completion:	90%
Completion Date:	October 2023
Base Construction Contract:	\$37,889,941
Approved Capital Budget:	\$43,000,000

Current Status:

South Rivanna work essentially completed with sludge pump improvements, general site improvements and final instrumentation programming work. Improvements continue at the Observatory Plant including completion of the new chemical building, GAC building expansion and general site improvements.

History:

The Observatory project includes the design and costs for upgrading the plant systems to achieve an upgraded 10 mgd plant capacity. Much of the Observatory Water Treatment Plant is original to the 1953 construction.

## 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:	55%
Completion Date:	September 2024
Budget:	\$10,000,000

**Current Status:**

The block walls are being erected at the pump station. Installation of two parallel water lines along Berkmar Drive is nearly complete. A new water line near the Timberwood Boulevard traffic circle is to be completed.

**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:	Design 75%
Construction Start:	September 2024
Completion:	December 2028
Current Project Estimate:	\$44,000,000

**Current Status:**

Preparation of engineering plans and specifications continues. RWSA staff is reviewing plans for the 90% design phase for the water line, which includes the vast majority of the piping to be installed under the project. Easement negotiations with UVA, and the UVA Foundation continue.

## AGENDA ITEM EXECUTIVE SUMMARY

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 is planned to replace the existing Stadium Road and Royal Pump Stations, which have exceeded their design lives or will require significant upgrades with the Observatory WTP expansion. The pump station will pump up to 10 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
Project Start:	July 2023
Design Status:	3%
Construction Start:	June 2026
Completion:	December 2030
Current Project Estimate:	\$79,700,000

Current Status:

RWSA continues to work with CSX railroad on the draft permit documents. Topographic survey for the pipeline alignment has been completed, and survey of the remaining project locations is underway. Staff are working on the final phases of the SFRR-RMR Nutrient Analysis, with the necessary equipment needed to complete study efforts scheduled to arrive in the Fall, and a final report published in the Winter. The SFRR Intake and Pump Station Project will require closure of the public boat ramp at the site once construction begins.

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

## AGENDA ITEM EXECUTIVE SUMMARY

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 of the raw water line, reservoir intake and pump station.

- **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:	Work Authorization Development
Construction Start:	November 2025
Completion:	January 2029
Budget:	\$43,000,000

Current Status:

A Joint Permit Application and supporting documents were submitted to VDEQ. Remaining NRCS requirements, including review and approval of the planning study, have been completed. The revised Plan Environmental Assessment was approved by the NRCS. NRCS funding for the final design and dam spillway upgrades will be requested at a future date. A report is under review by NRCS. Final design work is expected to start this month.

The final design work has been approved for the new raw water pump station, intake and hypolimnetic oxygenation system.

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. RWSA staff will continue to pursue federal funding for later phases of the project to cover a portion (70%) of final design and construction costs.

## AGENDA ITEM EXECUTIVE SUMMARY

- **South Fork Rivanna River Crossing**

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2020
Project Status:	90% Design
Construction Start:	May 2024
Completion:	September 2024
Budget:	\$7,000,000

**Current Status:**

Easement acquisition has begun and includes County of Albemarle property in Brook Hill River Park along Rio Mills Road. A required easement on the south side of the river is on a remnant property from the VDOT Berkmar Bridge project and cannot finalize that easement until the property transfer back to the original owner is complete. Additional permitting being sought for the project.

**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.

- **Upper Schenks Branch Interceptor, Phase II**

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

**Current Status**

After a recent meeting with City and County staff, RWSA has submitted project summary information and an easement on County property with a valuation estimate for the County's review. Initial meetings with County staff are occurring.

AGENDA ITEM EXECUTIVE SUMMARY

- **Central Water Line Project**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2021
Project Status:	45% Design
Construction Start:	December 2024
Completion:	December 2028
Budget:	\$41,000,000

**Current Status:**

Detailed field investigation and design are underway, as well as adjacent utility coordination. Next steps include conducting soil borings along the alignment and beginning easement acquisition. The construction start has been extended 6-9 months due to pipe delivery slowdowns.

**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.



## ACSA Board Future Policy Issues Agendas 2023-2024

Regular 3rd Thursday Monthly Meetings	Oct. '23	Nov. '23	Dec. '23	Jan. '24	Feb. '24	Mar. '24	April '24	May '24	June '24	Pending Issues	
	October 19th Recognitions	November 16th Recognitions	December 21st Recognitions	January 18th Recognitions	February 15th Recognitions	March 15th Recognitions	April 18th Recognitions	May 16th Recognitions	June 20th Recognitions	Water Supply Plan Project Status Reports Water Treatment Plants RWSA CIP Central Water Line-Reservoirs Pipeline North Rivanna System	
	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		
	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)
	Policy Discussion on Corporate Roles and Responsibilities	Annual Financial Report and Audit Report	Annual Investment Report	Board Organizational Meeting - Election of Officers	Operational Presentation - Administration	Operational Presentation - Engineering	Operational Presentation - Maintenance	Operational Presentation - IT	Operational Presentation - Finance	Board Organizational Meeting each January	
										Annual Report - January	
	Customer Experience (CX) Vision Statement (Customer Focused Transformations)	Recommendations on Policy Level Documents (Resolutions, By-Laws, etc.) on ACSA Roles and Responsibilities	Budget Guidelines and Schedule for FY '25 Budget/Rates	Strategic Plan Update 2023-2027	AMI Project Status Report	Proposed CIP Presentation	Proposed FY '25 Capital Improvements Program (CIP) Presentation	Proposed FY '25 Budget and Rates Workshop	FY '25 Budget and Rates Public Hearing	Water Audit and Energy Audit	
	Customer Information System (CIS) Billing (website; phone)	Ragged Mountain Dam Agreement Amendment; Water Supply Update	Holiday Schedule 2024	Annual Report 2023 - Customer Experience; Employee of the Month; Projects, etc.		"Fix a Leak" Water Conservation Event	Proposed FY '25 Capital Improvements Program (CIP) Public Hearing	Annual Water Quality Reports	FY '25 Budget, Rates and CIP Approval	Strategic Plan Updates-2023-2027 January and July	
										Fats, Oils, and Grease (FOG) Program	
										Climate Change and Sustainability	
	Mike Lynn Retirement Recognition		Board Meeting Schedule 2024	Annual Water Conservation Report			Proposed FY '25 Budget and Rates Overview		Amendments to Rules and Regulations, and Personnel Management Plan (Budget Implementation)	Annual Water Conservation Report - January	
										Operational Presentation-Sewer Rehab Relining	
							Resolution Scheduling Budget and Rates Public Hearing for June 20, 2024		Water Professionals Appreciation Day Recognition	National Drinking Water Week-April Imagine a Day Without Water - September	
							National Drinking Water Week Resolution		Water Quality Update - Annual Drinking Water Quality Report	Federal/State Water Quality Regulations Lead and Copper; PFAS; Emerging Contaminants	
										Emergency Preparedness - Regional Exercise	
										Annual Investments Report December	
										Operational Presentations	
										ACSA Customer Communications	
										Avon Satellite Operations Center	
										Federal Infrastructure Grant Funds	
									Data Management and Management Dashboards		
	Executive Session - Executive Director Mid-Year Review					Executive Session - Executive Director Annual Performance Review				Purchasing Policy Revisions	

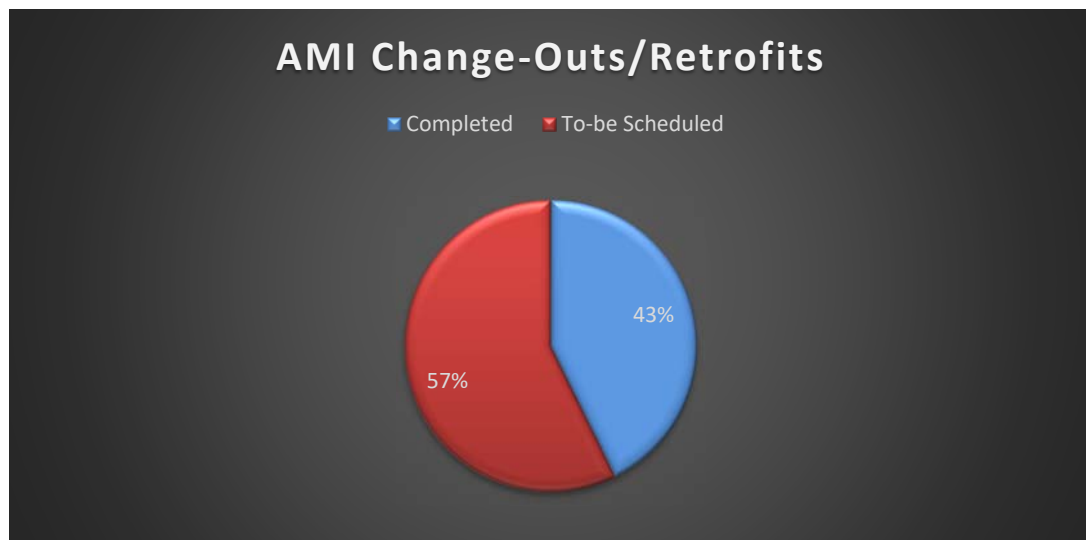
**ALBEMARLE COUNTY SERVICE AUTHORITY****AGENDA ITEM EXECUTIVE SUMMARY**

<b>AGENDA TITLE:</b> Advanced Metering Infrastructure (AMI) Monthly Update	<b>AGENDA DATE:</b> September 21, 2023
<b>STAFF CONTACT/PREPARER:</b> Quin Lunsford, Director of Finance	<b>ACTION:</b> Informational
	<b>ATTACHMENTS:</b> No

**BACKGROUND:** The ACSA Board authorized staff at its October 2019 meeting to execute agreements related to the AMI project. Monthly status updates are provided below:

**DISCUSSION:** Authority staff continues to collaborate closely with the selected vendor (Core & Main/Sensus) and the project management consultant (Esource). Notable accomplishments since the last update include:

- The final phase of the AMI began April 3<sup>rd</sup> and our installers have successfully upgraded 6,600+ meters. Approximately 43% of the ACSA's system is fully operational under the AMI program. Going forward, we anticipate between 65 and 100 meter upgrades each day.
- The second graphic below illustrates daily and weekly progress.



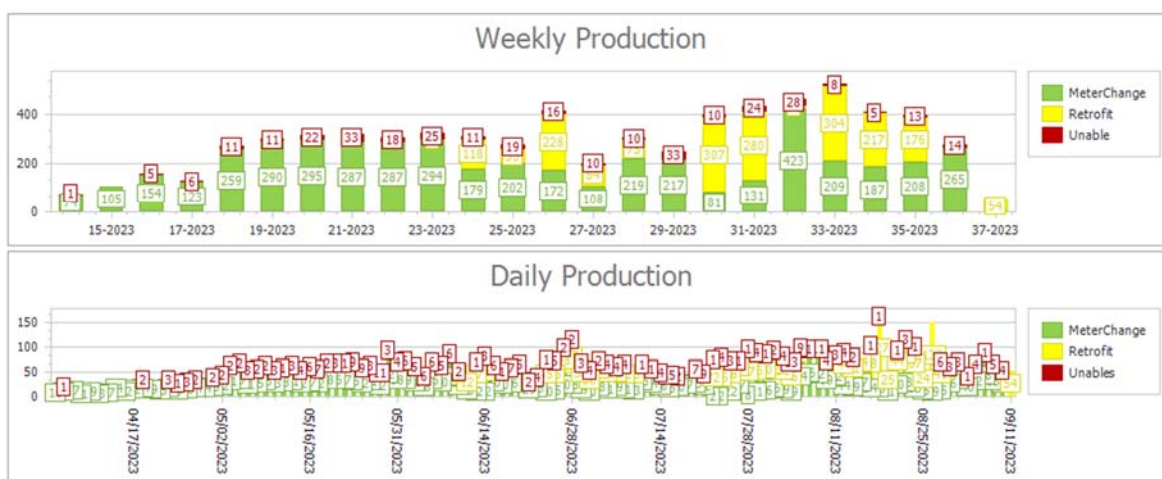
# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

### Albemarle County VA

Reading Rate						
Total	Good	No Read	Bad Read	Stale	Unable	Read Rate
6604	6571	4	11	18	0	99.50

Type	Size	Install	INC	Sked	Unable	Remove	RTU
MeterChange	3/4-inch	4574	2802	0	23	67	4
MeterChange	1 1/2-inch	0	0	0	0	1	0
MeterChange	1-inch	195	60	0	3	9	0
Retrofit	3/4-inch	1889	10137	0	1	4	0
Retrofit	1-inch	22	303	0	0	1	1



**BUDGET IMPACT:** Informational only.

**RECOMMENDATIONS:** None

**BOARD ACTION REQUESTED:** None; informational item only.

**ATTACHMENTS:** N/A



**Envirosight Jetscan 2.0 Camera**

# Universal Fit Provides Flexibility

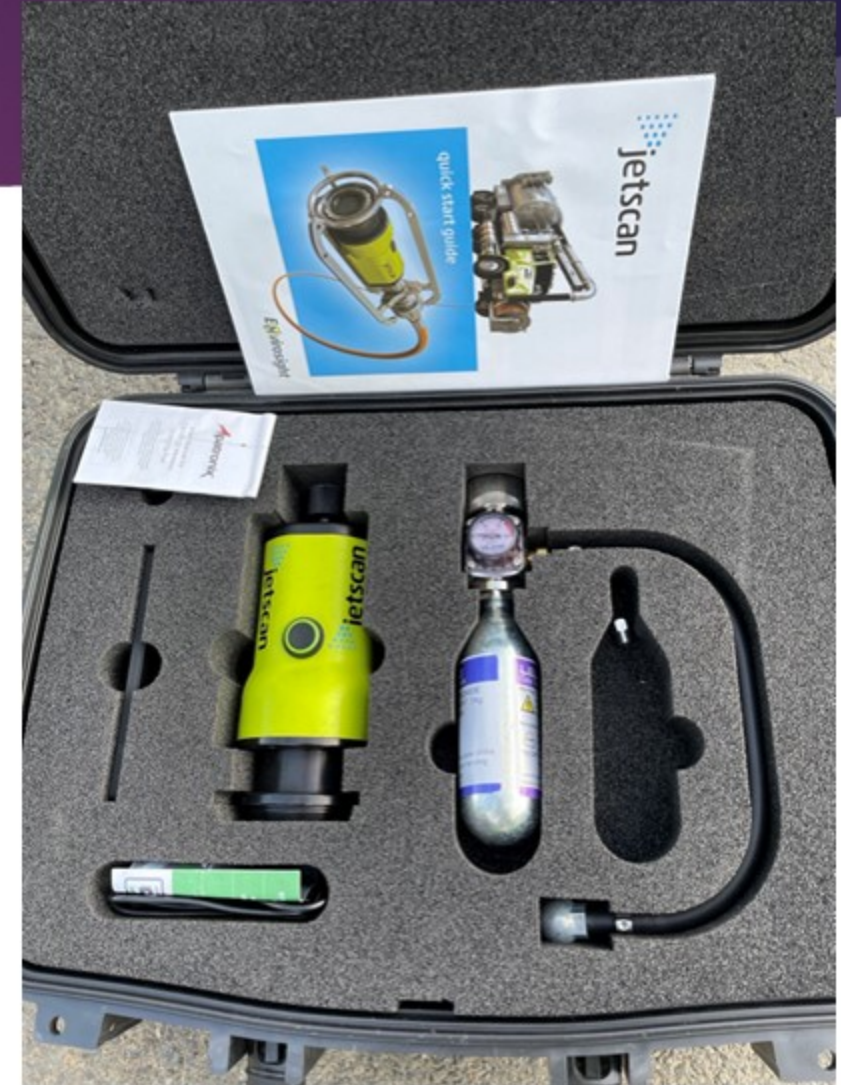


**Unit 31 Flush  
Truck**



**Unit 32 Flush  
Truck**

# Cleaning Confirmation

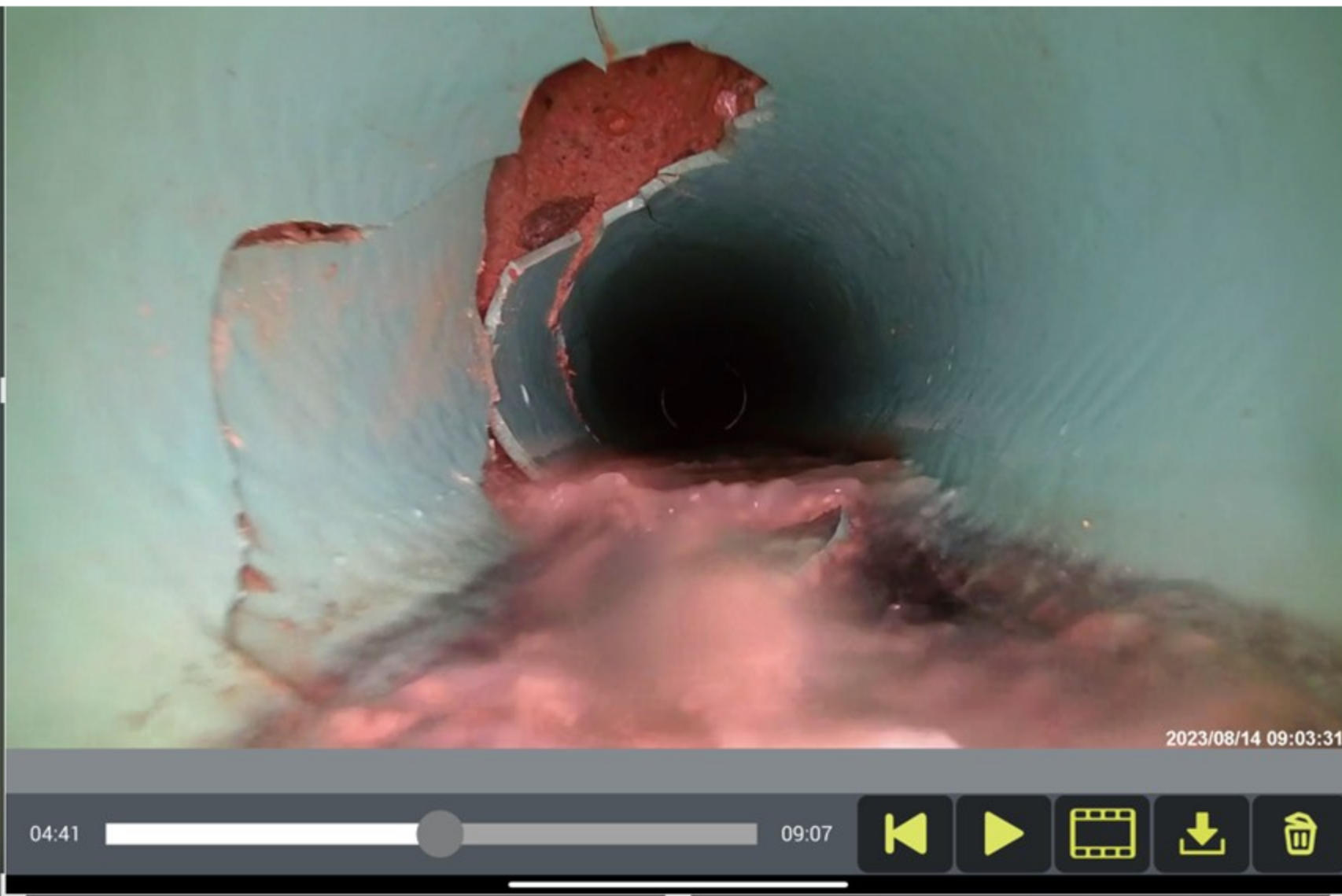


# Nozzle Selection





2023/08/14 09:03:24





**Commonwealth Drive – Utility Line Cable Run Through ACSA Sewer Line**



**Commonwealth Drive – Utility Line Cable Run Through ACSA Sewer Line**



**Commonwealth Drive –  
ACSA Sewer Line Repair**



**Commonwealth Drive –  
ACSA Sewer Line Repair**



**Unit 39**

**JetScan 2.0 saves time and use of more costly alternatives**

# Questions?



**ALBEMARLE COUNTY SERVICE AUTHORITY****AGENDA ITEM EXECUTIVE SUMMARY**

<b>AGENDA TITLE:</b> Imagine a Day Without Water	<b>AGENDA DATE:</b> September 21, 2023
<b>STAFF CONTACT(S)/PREPARER:</b> Emily Roach, Human Resources & Administration Manager	<b>ACTION:</b> Yes
	<b>ATTACHMENTS:</b> Yes

**BACKGROUND:** For many, living a day without water is not something to be imagined, but rather an unfortunate reality. The Imagine a Day Without Water campaign, which will take place on October 19<sup>th</sup> this year, is a National Day of Action that brings together communities and stakeholders from all over to highlight how invaluable and essential this precious resource is, and the need for continuous investment in infrastructure.

This year, as part of the ninth annual celebration, the ACSA, RWSA, and City of Charlottesville will once again host their annual “Imagine a Day Without Water” student art contest. This year, students are being asked to convey the theme “Tell us your action to save water!” The contest will be open to all youth in grades K-12 living in the City of Charlottesville and/or Albemarle County. There will be gift card prizes awarded to the winners of each grade category (K-2, 3-4, 5-6, 7-8, and 9-12), as well as a “fan favorite” selected by the community.

**BOARD ACTION REQUESTED:** Approve the attached resolution proclaiming October 19, 2023, as “Imagine a Day Without Water”.

**ATTACHMENTS:** Imagine a Day Without Water Flyer & Art Contest Entry Form  
Imagine a Day Without Water Resolution



# 2023 Youth Art Contest

## Imagine a Day without Water









**Open to:**  
All Youth that live in the  
City of Charlottesville  
& Albemarle County in  
Grades K to 12th.

### Theme: "Tell us Your Action to Save Water"

Water is essential for life. You need water for everything from brushing your teeth, growing the food you eat, and making the things you use everyday. We must value water, so show us the actions you take to save water.

**OCT 16<sup>TH</sup> - NOV 13<sup>TH</sup>**

## Contest Rules

-  All entries must convey the theme of the contest:  
**"Tell us Your Action to Save Water"**
-  Entries must be the work of one individual student, no collaborations.
-  Multiple entries from the same student will be accepted.
-  Original artwork or photography only. Entries submitted with copyrighted characters or images will not be accepted.
-  Artwork can be any 2-dimensional size. Suggestion sizes are horizontal 11" x 8.5" for drawings and 4:3 ratio for photography.
-  Any medium may be used (paint, colored pencils, crayons, markers, photography, etc.) No 3-D entries, please.
-  Teachers may submit for students or students can submit independently through their parents.
-  Submission Options:
  - Submit digitally through our Art Contest Platform Upload Form (accepts: JPEG/JPG, PNG, or GIF images).
  - Mail your entry to Water Conservation, 305 4th Street NW, Charlottesville, VA 22903.
  - In person at JMRL Central, Northside, and Crozet branches. Check JMRL.org for hours of service.

## PRIZES

### **For the Students:**

**\$200 gift card**

One winner in each category

- Grades K-2
- Grades 3-4
- Grades 5-6
- Grades 7-8
- Grades 9-12
- Fan Favorite (voting Nov 27<sup>th</sup> - Dec 6<sup>th</sup>)

### **For the Teacher:**

Teachers that have their students participate will be eligible for **\$200 gift card** for classroom projects.

- Most classroom submissions
  - A random winner each from a CCS, ACPS, and a private school or organization
- The more students that participate will increase the odds of winning!**



Imagine a Day  
Without Water



**[www.charlottesville.gov/artcontest](http://www.charlottesville.gov/artcontest)**

# Official Entry Form



**2023 Charlottesville "Imagine a Day without Water" Art Contest:  
Tell us Your Action to Save Water**

**Name:** \_\_\_\_\_

**Age:** \_\_\_\_\_

**School:** \_\_\_\_\_

**Grade:** \_\_\_\_\_

**Division Category:** Grades: K-2 ☐ Grades: 3-4 ☐ Grades: 5-6 ☐  
(Please check one)

Grades: 7-8 ☐ Grades: 9-12 ☐

**Teacher Sponsor Name** (if applicable) : \_\_\_\_\_

**Home Phone Number:** (\_\_\_\_) \_\_\_\_\_

(Parent/Teacher signature)

**E-mail Address:** \_\_\_\_\_

*If you are submitting in person or through mail, you must completely fill this out to be a valid entry.*

**Please write legibly! Electronic submissions will fill this out as part of your digital submission.**

*Posters become the property of the contest sponsors (City of Charlottesville, ACSA and RWSA) and will not be returned. The contest sponsors have the right to display or otherwise use the submissions for future promotions.*

**Deadline for all poster entries is Monday, Nov. 13<sup>th</sup>, 2023! Please attach this form to the back of your poster!**

- ✍️ Winners will be recognized through a press release and their work will be exhibited in public venues.
- ✍️ A panel of judges (to be selected by the contest sponsors) will select the winning posters for each grade division.
- ✍️ Posters will be judged on message (keep in mind the theme), originality, creativity and overall presentation.
- ✍️ Posters must be submitted by November 13<sup>th</sup> using one of the official submission processes by the end of business day.
- ✍️ The Fan Favorite winner will be selected by online voting from the top entries (number based on entries). The link with the eligible entries will be available at [www.charlottesville.gov/artcontest](http://www.charlottesville.gov/artcontest) starting on November 27<sup>th</sup> through December 6<sup>th</sup>.
- ✍️ One student may not win both the fan favorite and judges pick, and if the student is chosen for both, the fan favorite runner-up will win the Fan Favorite prize.
- ✍️ The winners of all categories will be announced by December 13<sup>th</sup>, 2023.

For updates and full list of rules and contest information, please go to our website. [www.charlottesville.gov/artcontest](http://www.charlottesville.gov/artcontest).

## Submit Online:

[www.charlottesville.gov/artcontest](http://www.charlottesville.gov/artcontest).

## Submit by Mail:

Water Conservation, 305 4th Street NW,  
Charlottesville, VA 22903.

## Submit in Person:

At JMRL Central, Northside, and Crozet  
branches. Check JMRL.org for hours of service.

## QUESTIONS?

Contact:

Jill Greiner

Water Efficiency Program Coordinator

434-970-3877

[waterconservation@charlottesville.gov](mailto:waterconservation@charlottesville.gov)

**Important:** Each poster mailed or delivered in person **MUST** have the official entry form attached to the back.

All information must be filled in completely and legibly. Illegible and incomplete entries will be disqualified. Please print or type ALL information. Entry forms may be copied if needed.

## RESOLUTION PROCLAIMING IMAGINE A DAY WITHOUT WATER

### OCTOBER 19, 2023

**WHEREAS**, water infrastructure is the lifeline of our communities and a day without water would be a public health and safety crisis, limiting the abilities of safety personnel such as firefighters and hospital staff, as well as businesses and homes, to function; and

**WHEREAS**, America's water infrastructure is aging and failing—and an estimated two million Americans are living without access to adequate drinking water and sanitation, with Black, Indigenous, and Communities of Color, as well as low-income communities, more likely to experience this lack of water and sanitation than white or affluent communities; and

**WHEREAS** we can help secure a better future for the millions of Americans who don't have reliable water service today and, in the generations, to come;

**NOW, THEREFORE, BE IT RESOLVED** that the Albemarle County Service Authority Board of Directors hereby proclaims October 19, 2023, as "Imagine a Day Without Water" to help Albemarle County residents and Albemarle County Service Authority customers recognize the value of safe, clean water to not only our community but to the quality of life, public safety, and economic health worldwide.

\*\*\*\*\*

Certified to be a true copy of a Resolution adopted by the Albemarle County Service Authority Board of Directors at a regularly scheduled meeting on September 21, 2023, by a vote of \_\_\_\_ to \_\_\_\_.

---

Richard Armstrong, Chair - ACSA Board



# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<b>AGENDA TITLE:</b> Operational Presentation – Role of the Construction Inspector	<b>AGENDA DATE:</b> September 21, 2023
<b>STAFF CONTACT(S)/PREPARER:</b> Jeremy M. Lynn, P.E., Director of Engineering	<b>ACTION:</b> <input type="checkbox"/> <b>INFORMATION:</b> <input checked="" type="checkbox"/>
	<b>ATTACHMENTS:</b> YES

**BACKGROUND:** The ACSA's *General Water and Sewer Construction Specifications* cover general conditions, technical specifications, and details for water and sewer utilities that are to be incorporated into the ACSA's water distribution and wastewater collection systems. The role of the Construction Inspector is to ensure that contractors adhere to these specifications. Our Construction Inspectors are involved throughout the life of a project, from project kick-off prior to construction until final inspection and project close-out.

**DISCUSSION:** A short presentation has been prepared to introduce the Board to our current group of experienced Construction Inspectors and provide an overview of their typical responsibilities.

**BUDGET IMPACT:** Informational only.

**RECOMMENDATIONS:** None

**BOARD ACTION REQUESTED:** None; informational item only.

**ATTACHMENTS:** PowerPoint presentation – Role of the Construction Inspector





# ROLE OF THE CONSTRUCTION INSPECTOR

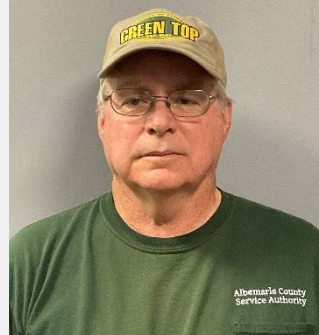


Board of Directors Meeting  
September 21, 2023

# MEET OUR INSPECTORS

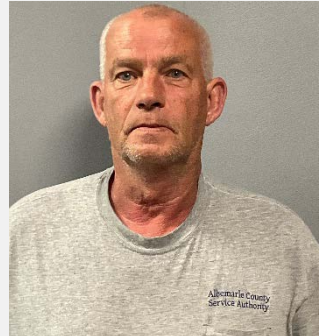
- **David Hensley**

- Maintenance: 1980-1989
- Alb. County Zoning: 1989-1994
- Inspector: 1994-current



- **Jeff Herr**

- Maintenance: Started in 1991
- Served as Meter Reader and as Utility Location Technician
- Inspector: 2008-current



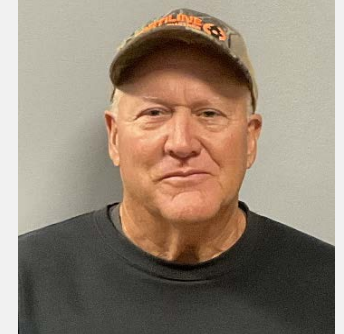
- **Charles DaCosta**

- Maintenance: Started in 2001
- Served as Utility Location Technician
- Inspector: 2023-current



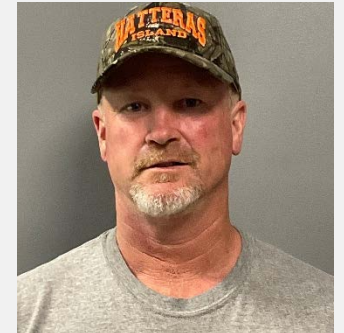
- **Jay Thomas**

- Maintenance: 1997-2003
- Served as Hydrant/Valve Mechanic
- Inspector: 2003-current



- **Mark Clinedinst**

- Maintenance: 1997-2008
- Served as Construction Crew Leader
- Inspector: 2008-current



## **Inspector Team Experience**

- **145** Years of Experience with ACSA
- **80** Years of Experience as Inspectors

# RESPONSIBILITIES PRIOR TO CONSTRUCTION

- Plans approved by Project Engineer and assigned to Construction Inspector.
- Approved construction drawings are provided to Construction Inspector for review and to become familiar with prior to Preconstruction Conference.
- Preconstruction Conference held with the contractor to answer questions and to discuss any specific issues, problems, or changes.
- ACSA's Utility Inspection Policy is discussed, and Construction Start Date is established.

Date: \_\_\_\_\_

**ALBEMARLE COUNTY SERVICE AUTHORITY**  
**PRECONSTRUCTION CONFERENCE**

Project: \_\_\_\_\_  
 Starting Date: \_\_\_\_\_  
 Owner/Developer: \_\_\_\_\_  
 Consulting Engineer: \_\_\_\_\_  
 Contractor: \_\_\_\_\_  
     Project Superintendent: \_\_\_\_\_  
     Phone Number: \_\_\_\_\_  
 ACSA Project Manager: \_\_\_\_\_  
 ACSA Project Inspector: \_\_\_\_\_

Highway Permit:   Not Applicable: \_\_\_\_\_   Approved: \_\_\_\_\_  
                             Pending Approval: \_\_\_\_\_   Other: \_\_\_\_\_

Miss Utility: Contractor has notified: \_\_\_\_\_  
                             Contractor will notify prior to construction: \_\_\_\_\_

Water Construction:  
 Starting Location: \_\_\_\_\_  
 ACSA Participation: \_\_\_\_\_ Yes \_\_\_\_\_ No  
 Special Conditions: \_\_\_\_\_

Sewer Construction:  
 Starting Location: \_\_\_\_\_  
 ACSA Participation: \_\_\_\_\_ Yes \_\_\_\_\_ No  
 Special Conditions: \_\_\_\_\_

General Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

All materials and construction shall comply with the General Water & Sewer Construction Specifications as adopted by the Albemarle County Service Authority.

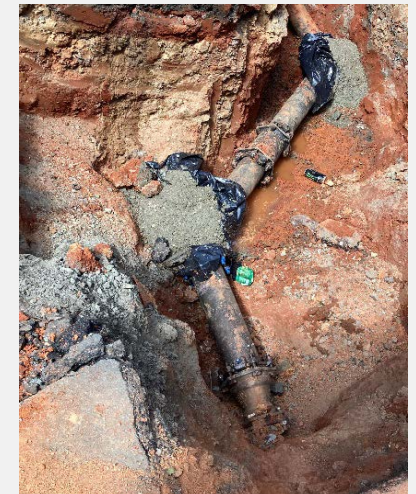
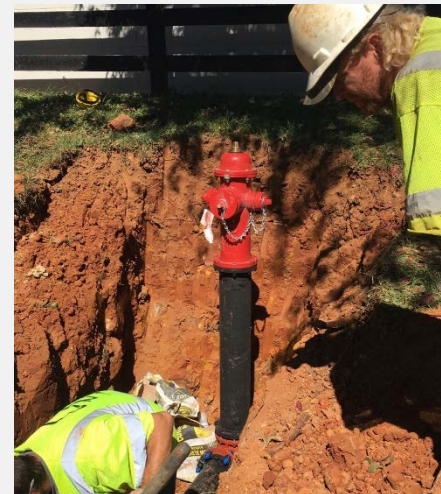
## INITIAL PROJECT START-UP RESPONSIBILITIES

- Become familiar with the layout of the project.
- Review materials to ensure compliance with Approved Products List.
- Verify equipment is onsite to adequately complete the work.
- Locate and mark existing ACSA utilities.



# CONSTRUCTION RESPONSIBILITIES

Water	Sewer
Verify Hydrants Set Plumb	Manhole Elevations
Adequate Thrust Blocks	Alignment and Grade of Sewer Lines
Verify meter boxes are at the edge of the right-of-way	Ensure Adequate Bedding
Review and Verify Trenching	
Verify construction stays within prescribed easements	
Take field notes on certain details of construction	





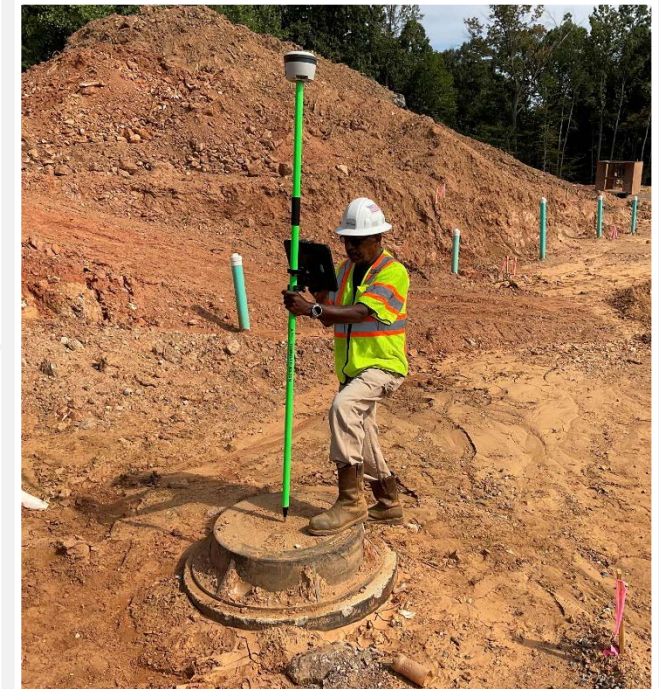
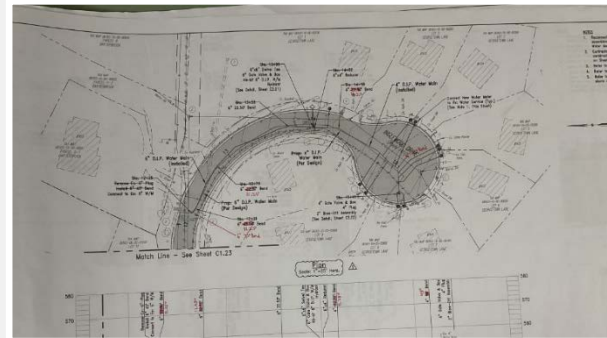
## VARIOUS WATER INSTALLATION PHOTOS



VARIOUS SEWER INSTALLATION PHOTOS

- Make certain work is conducted as specified on plans and meets the ACSA Construction Specifications.
- Work with the contractor regarding problems in the field (conflicts with other utilities, grades, rock, etc.).
- Incorporate changes that were not a part of the original plans.
- Utilize GPS equipment to locate all fittings, bends, valves, meters, manholes, and hydrants.
- Testing of water lines (i.e., water chlorination, hydrostatic pressure and samples for bacteriological test, high velocity flushing). Vacuum testing of sewer manholes, and air test of sewer mains.

## IN THE FIELD DECISIONS & RESPONSIBILITIES



# PROJECT CLOSE-OUT

- Includes final inspection, review and approval of as-built plans, and verification punch list items are complete.
- Completion of Cityworks Valve and Hydrant Inspections.
- Turn project back over to the Project Engineer to complete necessary Dedication paperwork.
- Within one year of acceptance, re-inspect the jobsite prior to the warranty expiration.

12:01 PM Thu Sep 7 LTE 100%

< Inspection Observations

INITIAL STATE

Open ✓

Closed

Partially Closed

NUMBER OF TURNS

21

VALVE DEPTH (INCHES)

18

VALVE FUNCTIONAL

Yes ✓

No

VALVE BOX CONDITION

Good ✓

Raise

Lower

Replace

Straighten

VALVE PACKING LEAKING

Yes

No

Not Applicable ✓

VALVE BOX CLEAN

Clean ✓

Needs to be Cleaned IMMEDIATELY

Needs to be Cleaned Eventually

## DEVELOPER VS. CIP PROJECTS

Additional responsibilities include:

- Assigned to project full-time (depending on size and scope of project).
- Communications with Property and Business Owners affected by the project.
- Maintain inventory of materials being installed and on-site.
- Verification of Contractor Pay Requests.
- Locate and mark existing ACSA utilities.
- More hands-on involvement (i.e., assuring property is restored to original or improved condition, assuring planned water shutdowns are completed satisfactorily).





“LIFE IS LIKE A BOX OF CHOCOLATES, YOU NEVER KNOW  
WHAT YOU’RE GONNA GET”

FORREST GUMP’S MOMMA



# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<b>AGENDA TITLE:</b> Strategic Plan Update  <b>STAFF CONTACT(S)/PREPARER:</b> Gary O'Connell, Executive Director	<b>AGENDA DATE:</b> September 21, 2023  <b>ACTION:</b> Yes  <b>ATTACHMENTS:</b> Yes
---	---

**BACKGROUND AND DISCUSSION:** The Board approved at the March meeting a new Strategic Plan with four themes: Data Optimization, Business Resilience (amended from Business “Continuity” at the April meeting), Customer Experience and Employee Experience.

Attached is an update on the “status” in each of the theme areas. Several larger projects are progressing, including being nearly halfway in the AMI meter installations (old Strategic Plan). One of the new initiatives in the Customer Experience theme is a new Customer Information System (CIS) that will include a new billing platform, as well as a new website and phone system. We are interviewing for a third-party consulting group to assist us in the needs assessment/feasibility phase to help craft the software and needed business process to be successful. We completed in Data Optimization the firewall replacement to improve IT systems, security, and have started the Data Classification Project that is the first step towards a Document Management System.

In reviewing our Strategic Plan “Playbook” that organizes our plan actions in more detail, and in looking at the upcoming schedule including current work activities and projects, we believe it to be a more realistic, doable plan if we extend the timeframe by two more years. So we are proposing Board approval of a 2023-2027 timeframe for the ACSA Strategic Plan. More typically these types of plans are in a five-year timeframe, and that more realistically fits us given all that is ahead to be accomplished.

**BOARD ACTION REQUESTED:** Approval of the proposed change to the 2023-2027 timeframe for the Strategic Plan.

### ATTACHMENTS:

-Strategic Plan as proposed to be amended to 2023-2027, plus updates;



2023  
-through-  
2027

THE ALBEMARLE COUNTY SERVICE AUTHORITY

# STRATEGIC FIVE-YEAR PLAN

121



## Data Optimization

Conduct a comprehensive review of all data and their sources to ensure proper access, classification, and utilization.

### COMPREHENSIVE REVIEW OF SYSTEMS

Conduct a thorough data mapping and analysis of all existing software and integrations to determine opportunities for improved efficiency.

### DOCUMENT MANAGEMENT SYSTEM

Perform classification of data to ensure proper management, and the procurement and implementation of a new Document Management System.

### SYSTEM MONITORING AND REPORTING

Review, maintain, and secure the data that we collect and share with users through dashboards or other reporting methods.



## Business Resilience

Ensure the current and future operations continue to function to serve our customers and meet environmental and climate action goals.

### BUSINESS CONTINUITY PLANNING

Develop a Business Continuity plan to ensure the continual operations during unplanned events.

### ENVIRONMENTAL SUSTAINABILITY

Enhance environmentally friendly practices and policies to reduce our carbon footprint and support global efforts to combat climate change.

### OPTIMIZATION OF RESOURCES

Perform an audit of current space, assess staffing levels, and explore opportunities to leverage consulting services in support of staff.



## Customer Experience

Provide best-in-class service ensuring the needs of our customers are exceeded.

### CUSTOMER EXPERIENCE VISION

Perform a comprehensive analysis of services and interactions as experienced through the eyes of our customers.

### CUSTOMER INFORMATION SYSTEMS (CIS)

Develop a modern and integrated CIS platform that provides clear, concise information to customers.

### CUSTOMER ENGAGEMENT OPPORTUNITIES

Enhance customer outreach to include community events, new customer orientations, and other important information through a variety of communication tools.



## Employee Experience

Retain and recruit a highly-skilled workforce and provide employees with resources and opportunities for professional growth.

### RECRUITMENT AND RETENTION

Explore strategies to ensure that we are attracting highly qualified candidates and ensure our workforce remains motivated and satisfied.

### EMPLOYEE ENGAGEMENT OPPORTUNITIES

Perform a comprehensive analysis of current practices and create new opportunities to ensure the ACSA is a great place to work.

### TRAINING AND EDUCATION PROGRAM

Review current learning opportunities to ensure quality, cost-effective training that increases employee and organizational productivity and enrichment.

# THE ALBEMARLE COUNTY SERVICE AUTHORITY

# STRATEGIC FIVE-YEAR PLAN



## Data Optimization



Conduct a comprehensive review of all data and their sources to ensure proper access, classification, and utilization.

1

### COMPREHENSIVE REVIEW OF SYSTEMS

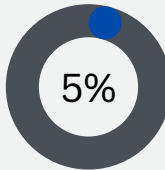
Conduct a thorough data mapping and analysis of all existing software and integrations to determine opportunities for improved efficiency.

### STATUS

- Started a list of mapping
- RFP for feasibility study of ESRI Utility Network
- Cityworks Respond deployment underway
- SCADA Phase 3 underway
- ESRI Utility Network Project Kickoff scheduled the week of September 11th

### SUCCESS RESULT

- All data collected is mapped. Additional efficiencies are identified and scheduled with each software application.



2

### DOCUMENT MANAGEMENT SYSTEM

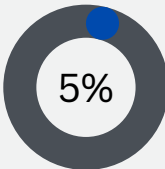
Perform classification of data to ensure proper management, and the procurement and implementation of a new Document Management System.

### STATUS

- Records Management Policy is under review (Library of Virginia)
- Develop data "Classifications" to develop RFP for a Document Management System

### SUCCESS RESULT

- Data is classified and properly maintained, all documents are digitized and stored in a secured Document Management System.



3

### SYSTEM MONITORING AND REPORTING

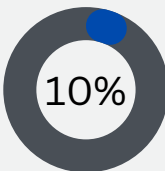
Review, maintain, and secure the data that we collect and share with users through dashboards or other reporting methods.

### STATUS

- Data classification first step with mapping (see above)
- New firewall replacement completed
- In the midst of replacing SCADA and phone system firewalls
- In the midst of scheduling two separate security assessments; one data focused and one physical focused
- Hired an IT Technician to monitor ACSA security more thoroughly

### SUCCESS RESULT

- All data is properly managed and secured and dashboards are utilized across the organization.



# THE ALBEMARLE COUNTY SERVICE AUTHORITY

# STRATEGIC FIVE-YEAR PLAN



## Business Resilience

Ensure the current and future operations continue to function to serve our customers and meet environmental and climate action goals.



1

### BUSINESS CONTINUITY PLANNING

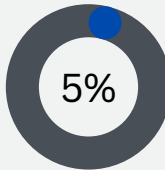
Develop a Business Continuity plan to ensure the continual operations during unexpected events.

### STATUS

- IT has revised and tested their Disaster Recovery
- Reviewing checklist in ERP
- Regional exercise held
- First-Come-First-Served policy approved

### SUCCESS RESULT

- Completion of a Business Continuity Plan document.



2

### ENVIRONMENTAL SUSTAINABILITY

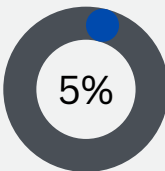
Enhance environmentally friendly practices and policies to reduce our carbon footprint and support global efforts to combat climate change.

### STATUS

- First electrical vehicle ordered for Engineering
- Working on vehicle charging stations at Spotnap
- Coordinating Urban Water Audit with the City and RWSA
- IT is implementing environmental friendly devices
- Facilities updating LED lighting at facilities
- Replacing the hot water heater as an Energy Audit recommendation

### SUCCESS RESULT

- Progress toward maximizing positive environmental practices.



3

### OPTIMIZATION OF RESOURCES

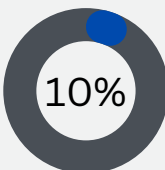
Perform an audit of current space, assess staffing levels, and explore opportunities to leverage consulting services in support of staff.

### STATUS

- Minutes transcription service implemented
- Role restructuring in Administration, Engineering and IT, with IT doubling up on offices
- Utilization of Applicant Pro

### SUCCESS RESULT

- Current space, staffing levels and evaluation of consultant usage are fully evaluated and recommendations documented.



# THE ALBEMARLE COUNTY SERVICE AUTHORITY

# STRATEGIC FIVE-YEAR PLAN



## Customer Experience

Provide best-in-class service ensuring the needs of our customers are exceeded.

1

### CUSTOMER EXPERIENCE (CX) VISION

Perform a comprehensive analysis of services and interactions as experienced through the eyes of our customers.

### STATUS

- Consolidation of various private development fees (plan review, construction inspection, as-built review)
- Customer Experience Vision Workshop held September 13th

### SUCCESS RESULT

- The customer experience vision is defined and enhancements are prioritized; follow-up on the CX Project recommendations.

20%

2

### CUSTOMER INFORMATION SYSTEMS (CIS)

Develop a modern and integrated CIS platform that provides clear, concise information to customers.

### STATUS

- Proposals under review for CIS system, one year long-feasibility study
- Hydrant meter usage- readings streamlined to be submitted through the website
- Planned outage map on website

### SUCCESS RESULT

- Implementation of a CIS solution that meets the needs of customers through a stable, streamlined, and integrated platform.
- AMI Portal complete for customer on-line usage information.

10%

3

### CUSTOMER ENGAGEMENT OPPORTUNITIES

Enhance customer outreach to include community events, new customer orientations, and other important information through a variety of communication tools.

### STATUS

- Hiring process for Communications firm from three proposers - communications and education
- Two customer newsletters sent out.
- Rain Barrel Workshop, Riverfest Event
- Imagine a Day Without Water fall scheduling

### SUCCESS RESULT

- Pertinent information is provided to customers in their preferred manner.

10%

# THE ALBEMARLE COUNTY SERVICE AUTHORITY

# STRATEGIC FIVE-YEAR PLAN



## Employee Experience



Retain and recruit a highly-skilled workforce and provide employees with resources and opportunities for professional growth.

1

### RECRUITMENT AND RETENTION

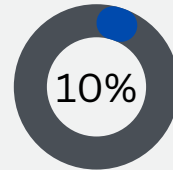
Explore strategies to ensure that we are attracting highly qualified candidates and ensure our workforce remains motivated and satisfied.

### STATUS

- Market Rate Increase approved
- Vacation Carryover Policy approved
- Faster background checks - new system

### SUCCESS RESULT

- Implement recruitment and retention strategies.



2

### EMPLOYEE ENGAGEMENT OPPORTUNITIES

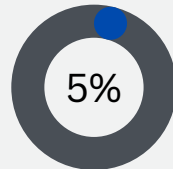
Perform a comprehensive analysis of current practices and create new opportunities to ensure the ACSA is a great place to work.

### STATUS

- Reward Builder Program
- Evaluation Process and Timing Reviewed
- Post-Accident Testing Draft Review
- Employee of the Month Recognitions begun

### SUCCESS RESULT

- Implement employee engagement strategies.



3

### TRAINING AND EDUCATION PROGRAM

Review current learning opportunities to ensure quality, cost-effective training that increases employee and organizational productivity and enrichment.

### STATUS

- Supervisory Training(s)
- CDL Training
- Emergencies Training - multiple sessions held, including all supervisors
- Fall Leadership Development Workshop

### SUCCESS RESULT

- Employees are properly trained and have equal opportunities to pursue advanced education and training programs.

