



## BOARD OF DIRECTORS' MEETING

March 16, 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. Recognition – Scott Morris- Retirement- 29 Years of Service
9:10 a.m.	3. Approve Minutes of February 16, 2023
9:15 a.m.	4. Matters from the Public
9:25 a.m.	5. Response to Public Comment
9:35 a.m.	6. Consent Agenda
	a. Monthly Financial Reports
	b. Monthly Capital Improvement Program (CIP) Report
	c. CIP Authorizations
	d. Monthly Maintenance Update
	e. Rivanna Water and Sewer Authority (RWSA) Monthly Update
	f. ACSA Board Policy Future Issues Agenda 2023
	g. Advanced Metering Infrastructure (AMI) Project Update
9:40 a.m.	7. Proposed FY 2024 Capital Improvement Program (CIP)
10:05 a.m.	8. AMI Update – Power Point Presentation & Video
10:30 a.m.	9. Strategic Plan 2023-2025 Draft Presentation
11:00 a.m.	10. Customer Late Payments – Update
11:15 a.m.	11. Items Not on the Agenda
	12. Adjourn



**ALBEMARLE COUNTY SERVICE AUTHORITY**

**STATEMENT OF CHAIR TO OPEN MARCH 16<sup>TH</sup>, 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**

1           The Board of Directors of the Albemarle County Service Authority  
2 (ACSA) met in a regular session on February 16, 2023, at 9:00 a.m. at the  
3 Administration and Operations Center at 168 Spotnap Road in  
4 Charlottesville, Virginia.

5 **Members Present:** Mr. Richard Armstrong, Chair; Mr. Nathan Moore; Dr.  
6 Lizbeth Palmer; Mr. John Parcels; Mr. Clarence Roberts; Mr. Charles  
7 Tolbert, Vice-Chair.

8 **Members Absent:** None.

9 **Staff Present:** Mike Derdeyn, Brendan Ganz, Jeremy Lynn, Michael Lynn,  
10 Quin Lunsford, Alex Morrison, Gary O'Connell, Emily Roach (remote  
11 participation from home), Danielle Trent, April Walker, Justin Weiler.

12 **Staff Absent:** None.

13 **Public Present:** Melanie Wemple, E-Source; Filomena Gogle, E-Source;  
14 Brian Key, Bedford Water.

15  
16 1. Call to Order and Establish a Quorum – Statement of Board Chair

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

20  
21 2. Approve Minutes of January 19, 2023

22           Mr. Parcels stated that he had one small correction on page 9, line  
23 28. He stated that the word “ad” should be “and.”

24           ***Mr. Parcels moved to approve the minutes as amended,***  
25 ***seconded by Mr. Tolbert. All members voted aye.***

26  
27 3. Matters from the Public

28           There were no matters from the public.

29  
30 4. Response to Public Comment

31           There was no response to public comment.



**Albemarle County Service Authority Board of Directors**5. Consent Agenda***a. Monthly Financial Reports –***

***b. Monthly CIP –*** Mr. Tolbert stated that he had a question about the Four-Story Backflow project on page 64. He asked if all the customers have been contacted and have responded, or if there are still some to be contacted. Jeremy Lynn, Director of Engineering replied that the staff has been in touch with most of them. He stated that regarding Phase 1 of the project, 23 of 24 have been completed. He noted that the last one is scheduled to be completed Monday. He mentioned that he wanted to give credit to Alex Morrison and Angel Monterrozo, who have both done a tremendous job in bringing Phase 1 to near completion. He stated that if the Board approves the consent agenda, there is a Board authorization included that will add Phases 2 and 3 to the current contract with Foothill Irrigation. He stated that the staff would be ready to begin with those phases almost immediately. He noted that the staff will need to reengage with the property owners for Phases 2 and 3, once there is a work schedule. Mr. Tolbert stated that he thought he recalled the staff having some difficulty reaching one customer. Mr. Lynn replied that he would have to double check, but he is sure they are close to having been in touch with every customer.

***c. CIP Project Close-Outs –******d. Monthly Maintenance Update –******e. Rivanna Water and Sewer Authority (RWSA) Update –******f. ACSA Board Policy Future Issues Agenda 2022 –******g. Advanced Metering Infrastructure (AMI) Project Update –******h. Holiday Schedule for 2023 –******i. ACSA Board Meeting Schedule for 2023 –***

***Dr. Palmer moved to approve the consent agenda, seconded by Mr. Parcels. All members voted aye.***

**Albemarle County Service Authority Board of Directors**6. Strategic Plan Development Report

Mr. O'Connell stated that he has scheduled three or four items to discuss today that would not only look back, but also help move the ACSA forward with the Strategic Plan. He stated that the staff did several things back in the fall of 2022 to look at where the organization is going in the future. He stated that he would first go over the interviews conducted with the Board about the Strategic Plan and feedback on future issues. He stated that the second item was the Customer Experience Project that involved several surveys and interviews with customers and employees. He mentioned that the ACSA engaged E-Source, a utility consulting firm, to help with that project. He stated that the third item was the Best Practices Review Panel that took place in the fall with three general managers from other utilities, one of which is present at the meeting today to help with that presentation.

**a. Board Strategic Plan Considerations – Summary-** (Attached as Pages \_\_\_\_\_) Mr. O'Connell stated that from what he has heard, the feedback from the Board seems to fall into seven categories, with the first being the ACSA is operating well in difficult times. He stated that the prior Strategic Plan happened during the pandemic but to everyone's credit, particularly the ACSA Lead Team, a lot was accomplished. He stated that the other six categories are focus on our people, overall water system improvements, stable long-term finances, good customer experience, new billing system, and climate change and sustainability.

Mr. O'Connell stated that in terms of the ACSA operating well in difficult times, some Board comments were that the organization "hums right along," and is well run, there is steady leadership, and they appreciate the work the staff is doing. He stated that the Board likes the staff being present at Board meetings and enjoys the operational presentations and updates. He mentioned that the Board also commented on the ACSA staff's quick response to their requests and that great job the organization has done with integrating new technology.

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1           Mr. O'Connell stated that the next slide outlines some of the staff  
2 response to the Board's comments on operating well in difficult times. He  
3 stated that the staff takes a great deal of pride in their work and likes  
4 supporting the Board and ACSA customers. He stated that several  
5 employees commented on the implementation of the larger technology  
6 projects and the effort to integrate those systems.

7           Mr. O'Connell stated that the next category involves the focus on the  
8 ACSA's people/staff. He stated that the Board highlighted succession and  
9 keeping other employees involved, how well the ACSA has done in this  
10 weird hiring market, training, high morale, low turnover, service and  
11 employee recognitions, respect, tolerance, and acknowledgement, and  
12 staying current with the salary market. He mentioned that the staff agrees  
13 with the Board comments and have proposed a theme of the "Employee  
14 Experience" for the next Strategic Plan. He noted that the goal is to retain  
15 and recruit a highly skilled workforce and provide employees with  
16 resources and opportunities for professional growth.

17           Mr. O'Connell stated that the next category is overall water system  
18 improvements (infrastructure). He stated that it begins with the ACSA  
19 having clean, safe, reliable, and affordable water service. He stated that  
20 over the next five years, there are about \$300 million worth of infrastructure  
21 projects between the ACSA and RWSA to deliver that vision. He stated that  
22 RWSA will present their CIP program at the upcoming meeting at the end  
23 of this month. He mentioned that there will be a significant increase in cost  
24 from RWSA, which will require a double-digit increase in costs to ACSA  
25 customers to support that. He noted that the staff will go through this  
26 increase in depth at the April ACSA Board meeting, so the Board can see  
27 the projects that are being discussed and the need for them. He stated that  
28 part of infrastructure is reliability and Mike Lynn, Director of Operations,  
29 has spent a lot of time working on the Emergency Response Plan. He  
30 added that April Walker, Director of I.T., and her staff have done a lot of  
31 work on the cybersecurity portion as well.

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1           Mr. O'Connell moved to the next slide, which outlined the Boards  
2 comments surrounding the category of stable long-term finances. He stated  
3 that there was some discussion about the rates when talking about the  
4 budget, and the idea of trying to hold increases to 5% is not feasible. He  
5 stated that all the financial policies and approaches tie into the annual  
6 submission of the budget and rates in March and April.

7           Mr. O'Connell stated that the next category focused on the customer  
8 experience. He stated that the ACSA has a good reputation with customer  
9 service that is reflected in the customer survey results. He mentioned that  
10 one of themes in the new Strategic Plan will focus on the customer  
11 experience and how to improve that. He noted that the goal will be to  
12 provide best in class service ensuring the needs of the ACSA customers  
13 are exceeded.

14           Mr. O'Connell stated that another category of focus was a new billing  
15 system. He stated that about 70% of the ACSA's customers are using  
16 some type of electronic bill payment method. He stated that one of the  
17 Strategic Plan items will be a new billing system. He mentioned that the  
18 staff is in the midst of developing a request for proposals (RFP) for that  
19 project. He mentioned that along with a new billing system will be the  
20 integration of a new phone system and website enhancements, given the  
21 amount of customer information that can be utilized.

22           Mr. O'Connell stated that the last category was climate change and  
23 sustainability. He stated that this is a major part of the ACSA's vision of  
24 "serve and conserve." He stated that there was a lot of work spent in the  
25 last Strategic Plan on energy and water audits, and ways to conserve. He  
26 mentioned that the ACSA is looking at solar power for the new satellite  
27 facility being built on Avon Street. He noted that the organization is also  
28 gearing up for electric vehicles when the market is right.

29           Dr. Palmer asked, regarding the new billing system, if the ACSA was  
30 getting rid of Paymentus. Mr. O'Connell replied that Paymentus is attached  
31 to the billing system. He stated that it may or may not stay, but the staff will

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1 have to get deeper into the procurement to see how it will work with a new  
2 billing system, if at all. He mentioned that there have been limitations with  
3 what the ACSA's Paymentus can do because of its connection to  
4 BillMaster.

5 Dr. Palmer stated that she uses Paymentus to pay other utility bills and  
6 one annoying feature she has seen is the requirement to use automatic  
7 withdrawal to avoid a service fee. She stated that this is fine, however the  
8 email that one receives regarding their bill does not show how much the bill  
9 is. She noted that the customer must log into the system to see the bill  
10 amount and look at usage. She stated that if the bill information showed in  
11 the email, as opposed to having the extra step of logging into the system, it  
12 would be more helpful to customers.

13 Dr. Palmer stated that she also had a question about the ACSA's  
14 recycling. She asked what the ACSA recycles. Mr. O'Connell stated that  
15 the ACSA recycles everything from office supplies to old meters. He stated  
16 that the ACSA also participates in auctions where old equipment gets sold  
17 and recycled. Dr. Palmer stated that she was curious as to whether the  
18 recycling encompassed the entire organization. Mr. O'Connell replied that  
19 the recycling happens across the whole organization. He noted that the  
20 recycling shifts as the marketplace changes. He stated that there are bins  
21 in the Maintenance shop full of the old brass meters for recycling. He  
22 added that the recycling is comprehensive from what he has seen  
23 elsewhere.

24 Mr. Tolbert stated that one of the items under Strategic Plan  
25 considerations was how to improve the complaints about taste. He asked if  
26 the ACSA was receiving a lot of complaints about the taste of the water.  
27 Mr. O'Connell replied no and stated that this was a comment from the  
28 Board. Mr. Tolbert asked if there was a question about taste on the  
29 customer survey. Mr. O'Connell replied that there was a question about  
30 taste and odor/water quality. Mr. Tolbert stated that he sees a difference  
31 between quality and taste. Mr. O'Connell stated that there are very few

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1 complaints about the taste. He stated that most complaints about water  
2 quality are related to discoloring of the water, which usually happens after  
3 there has been some flushing or a water leak that causes it. He noted that  
4 there has been a sediment issue in one or two places in the system, so  
5 there has been a lot of flushing in those areas. He added that the taste  
6 complaints almost always come from a customer that was previously on a  
7 well system, and the water does not taste the same as well water.

8 Mr. Tolbert stated that the taste of the water, to a large extent, is  
9 determined by the treatment process at the plant and the chemicals or  
10 filters they are using. Mr. O'Connell stated that the water can pick up a bit  
11 of a taste as it goes through the pipe network and if someone has older  
12 plumbing in their house. He mentioned that the closer a customer is to the  
13 treatment plant, the more they may be able to taste the chlorine in the  
14 water as some people are very sensitive to that.

15 Melanie Wemple, consultant with E-Source, stated that there was not a  
16 question on the survey specifically about taste, but rather quality, safety,  
17 and reliability. Mr. Tolbert stated that it is important to make the distinction  
18 between quality and taste because they are not the same thing. Mr.  
19 O'Connell stated that most customers make that distinction, and the  
20 comments they make are on what they are seeing whether it is air or some  
21 discoloration in the water. Mr. Tolbert stated that discoloration would be a  
22 change they notice, whereas taste is something that would have always  
23 been there. Mr. O'Connell added that he gives a lot of credit to Tim Brown,  
24 Environmental Compliance Specialist, who tracks and follows up on any  
25 water quality complaints, which are few.

26 Mr. Moore stated that he recalls a discussion a few months ago about  
27 the progress on the AMI project and the back-end system, and other  
28 systems that the ACSA hopes to automate more in the future. He asked if  
29 Mr. O'Connell could speak on that further. Mr. O'Connell replied that all the  
30 water consumption information is part of the AMI project. He stated that on  
31 the back end of AMI is a sophisticated program called Sensus Analytics

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1 and it is full of algorithms that create all types of reports. He mentioned that  
2 there are reports that both the customers and staff can view. He stated that  
3 part of the billing system will be integrated with the financial system as well.  
4 He noted that part of the Strategic Plan is an item around data  
5 management and optimization, to ensure all systems communicate with  
6 each other and that the staff is getting the level of reporting necessary. He  
7 added that most of the pieces are in place, so the next step is to ensure  
8 that everything is connected, and the data is being used to its full potential.

9 ***b. Customer Experience Project – Summary/Recommendations***

10 (Attached as Pages\_\_\_\_\_) Mr. O'Connell stated that this next  
11 item would be presented by Philomena Gogle and Melanie Wemple from  
12 E-Source, which is a national utility consulting group. He stated that they  
13 have a group that works in customer service/experience, and they were  
14 involved in the ACSA's Customer Experience (CX) Project. He stated that  
15 many of their recommendations will come into play with the upcoming  
16 Strategic Plan.

17 Melanie Wemple stated that E-Source works with utilities in the United  
18 States and Canada mostly, including electric, natural gas, and water. She  
19 stated that they led the ACSA's Customer Experience Project mostly in the  
20 third and fourth quarter last year to help the organization reassess where  
21 things are in terms of customer experience. She stated that she would give  
22 the Board a quick overview of the project, discuss some of the key insights  
23 and recommendations, and any questions the Board may have.

24 Ms. Wemple stated that she felt it would be helpful to level set and  
25 define what customer experience is at the beginning of the project. She  
26 stated that most people think it just involves customer service and phone  
27 calls, but customer experience is everything related to the business that  
28 affects a customer's perception including service quality, customer service,  
29 and the price of service. She mentioned that service quality relates to the  
30 quality of the water, reliability, pressure, safety, taste, and odor. She noted  
31 that customer service includes the image and branding of a company,

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1 which is important because a lot of customers do not directly interact with  
2 ACSA employees. She stated that the price of service is made up of things  
3 like rates, fees, and one-time payments. She added that one of the  
4 objectives of the CX project was to identify gaps and opportunities by  
5 understanding these key CX interactions across the ACSA and make  
6 recommendations based on those areas.

7 Ms. Wemple stated that in September, E-Source started a current state  
8 assessment, working with ACSA staff to pull in some existing CX insights.  
9 She stated that they also held small group interview sessions with the staff  
10 and leadership team. She noted that E-Source likes to work from the inside  
11 out, to gain an understanding of what the employees feel the organization's  
12 strengths are in terms of customer experience. She mentioned that this is  
13 where the voice of the employee really comes into play. She stated that  
14 they also conducted a survey with ACSA customers and used this tool to  
15 recruit a few customers for virtual interviews. She stated that all this  
16 information was compiled to create their recommendations and develop a  
17 CX action plan for the ACSA.

18 Ms. Wemple stated that next she would walk through the Board through  
19 some of the findings and key insights, beginning with the voice of the  
20 employee. She stated that when speaking with the staff, it was clear that  
21 there is a strong understanding of what it means to be a good steward of  
22 customer experience. She stated that there was also a strong alignment on  
23 how ACSA employees want to serve customers, despite not having a  
24 formal CX vision. She noted that this is a strength of the organization, as  
25 most utilities have a disconnect between what it means to deliver a good  
26 customer experience and the employees charged with doing so.

27 Ms. Wemple stated that when looking at the voice of the employee,  
28 there was also the strong sentiment that leadership exemplifies the desired  
29 behaviors. She stated that when employees were asked about having the  
30 tools, skills, and resources needed, there was a strong positive response.  
31 She mentioned that there was also a strong sense that leadership clearly



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1 communicates to their staff the idea that customers are a priority. She  
2 noted that there may be an opportunity to think about goals and metrics,  
3 which may not currently be designed with the customer experience in mind.

4 Ms. Wemple stated that a lot of employees did express that the  
5 workforce is lean and there are a lot of manual processes, which can both  
6 create CX risk. She mentioned that employees felt some of the internal  
7 systems are not optimized to make it easy to provide that good customer  
8 experience. She noted that another challenge employees saw is attracting  
9 and retaining a strong workforce. She mentioned that turnover in the  
10 Maintenance department specifically was noted as a challenge. She stated  
11 that training on CX expectations is a bit informal, so there is an opportunity  
12 to solidify that.

13 Ms. Wemple stated that E-Source graphed the evolution of the ACSA's  
14 customer relationship, based on the interviews they conducted. She stated  
15 that what they saw was employees tended to break up the customer  
16 experience into three buckets. She stated that the first one was  
17 paternalistic, which was pre-2005, and took the stance of the ACSA knows  
18 what is best for its customers and will give them the solutions that the  
19 organization thinks they need. She mentioned that more recently, between  
20 2005-2010, the customer relationship turned into a more facilitative one,  
21 where the ACSA focused on building relationships in the community and  
22 being more responsive to customer requests. She added that in the last  
23 decade or so, the relationship has been more transformational, with a more  
24 enthusiastic partnership with the customer.

25 Ms. Wemple stated that she would now switch gears to the voice of the  
26 customer. She stated that one can see the positive things going on at the  
27 ACSA when looking at the customer survey results. She stated that there  
28 were two key questions asked in the customer survey last year, which were  
29 overall satisfaction and the ease of doing business. She noted that 85% of  
30 customers were either satisfied or very satisfied overall, and a similar  
31 percentage felt it was easy or very easy to conduct business with the

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1 ACSA. She stated that there was also an open-ended question asking  
2 customers to explain why they gave the response they did. She noted that  
3 most of the positive statements were related to employees and reliability of  
4 service. She mentioned that there were only two customers that  
5 commented on the taste of the water, out of about 200 total responses.

6 Mr. Parcels asked if there were any comments or takeaways from the  
7 customers that gave a response of dissatisfied or very dissatisfied. Ms.  
8 Wemple replied yes. She stated that most of them were about rates, fees,  
9 and billing which, not to discount the comments, is common. Mr. Parcels  
10 stated that the ACSA's marketing makes the point of how the  
11 organization's rates and fees compared to the broad range, so perhaps the  
12 customers are not seeing or understanding that.

13 Mr. O'Connell added that it could just be the customer(s) had a high bill.  
14 He stated that one of the things the staff tried to do was capture the  
15 dissatisfied responses, track them, call the customers, interview them and  
16 follow up, and in a few cases, go out into the field. He stated that it  
17 surprised him that a couple of customers that chose "dissatisfied" as a  
18 response on everything had small changes in their bill from one month to  
19 the next. Ms. Wemple stated that the ACSA did a lot of extra work. She  
20 stated that a lot of utilities do not use the survey to close the loop. She  
21 stated that this coordinating nicely with the E-Source customer interviews.

22 Mr. O'Connell stated that the survey was answered by 800 customers  
23 out of 22,000, so the results reflect a certain voice. He noted that almost all  
24 the surveys were hand-written, even though they were given the option to  
25 fill it out online. Ms. Wemple agreed that most of the surveys were done on  
26 paper, which is uncommon. She stated, however, that it worked out nicely  
27 being able to insert them with the monthly bills. She added that there was  
28 the option to scan a QR code and fill it out online, and e-bill customers  
29 were encouraged to use this method as well.

30 Ms. Wemple stated that the customer survey was on a simple 1-5 scale,  
31 with 1 being the lowest rating and 5 being the highest. She stated that

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1 everything was put in to one of two main categories. She stated that the  
2 first was interactions, which looked at a few key customer interaction areas.  
3 She mentioned that the online interaction area ranked a bit lower when it  
4 came to ease of interaction. She stated that making an online service  
5 request is a relatively new functionality for the ACSA, thus some customers  
6 had not had the opportunity to use it. She mentioned that participation in a  
7 water conservation program, reporting a water or service issue, starting, s  
8 or transferring services, reaching a customer service representative, and  
9 understanding the bill were other items in this area that increased in ease  
10 according to the scores. She added that this trend is similar to other  
11 utilities, except for starting or transferring services. She noted that this  
12 tends to be on the lower end of the scoring.

13 Mr. Parcels stated that this alludes to a comparison and asked if Ms.  
14 Wemple could be more specific. Ms. Wemple stated that some utilities are  
15 very poor at starting or transferring services. She stated that in this case,  
16 reaching a customer service representative is scored high because it is  
17 very person-driven. She noted that these are not self-service transactions  
18 that are being scored. She noted that she thinks if the question asked how  
19 easy it is to start service on the website, the score would be lower.

20 Mr. Parcels asked, on the flip side of that, if there was an  
21 overwhelming of customer requests that tax the system or is it tolerable.  
22 Mr. O'Connell replied that in a world of post-pandemic customer arrears,  
23 the system has been greatly taxed. He noted that it has gotten better over  
24 the last few weeks. Mr. Lunsford added that the staff can readily manage  
25 the volume of requests pre- and post-pandemic, but there is the opportunity  
26 to help the customer service team better serve customers in the manner  
27 they wish to be able to.

28 Ms. Wemple stated that the second category of questions the survey  
29 asked customers were a set of agreement questions. She stated that the  
30 areas that ranked the highest were providing safe and reliable water  
31 service and communicating useful information about the water. She noted

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1 that the challenges are in the areas of reasonable prices and keeping  
2 customers informed about service disruptions. She noted that the ACSA  
3 also scored well on having helpful employees who are quick to respond,  
4 which applies to those employees in the field as well.

5 Ms. Wemple stated that looking at all the information, E-Source came  
6 up with six key recommendations for the ACSA's customer experience.  
7 She stated that one of them was about establishing what is known as a CX  
8 vision. She stated that this will help to set customer experience priorities  
9 and shape future enhancements, which should tie in nicely with the ACSA's  
10 mission, vision, and values. She added that having a CX vision is also  
11 helpful for onboarding and training, as it will help set the expectation for  
12 how employees are to serve customers.

13 Ms. Wemple stated that the next recommendation was to enhance the  
14 website, increase self-service, and create a preference center to support  
15 automation. She stated that this is an opportunity for the office staff to  
16 focus on other important items, rather than fielding so many phone calls.  
17 She noted that a preference center, like what may be seen with online  
18 banking, will help customers customize how they interact and communicate  
19 with the ACSA.

20 Ms. Wemple stated that the third recommendation was to "right-size"  
21 customer service to ensure effective operations. She stated that the ACSA  
22 Customer Service team is a small one that does a lot. She stated that with  
23 a new billing system and the AMI system, it is important to look at how the  
24 team is organized because those technology changes will impact how they  
25 interact with customers.

26 Ms. Wemple stated that on the note about customers not having an  
27 awareness of, or understanding how the rates are established, the fourth  
28 recommendation is for a customer communication strategy. She stated that  
29 this includes a focus on customer experience, rates, value, and reliability to  
30 help them connect the dots. She mentioned that it is challenging, especially  
31 if there is an expected rate increase.

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1 Ms. Wemple stated that the fifth recommendation focuses on new  
2 connections. She stated that there is a lot of construction in the area, which  
3 impacts whole communities and individuals alike. She noted that it also  
4 affects contractors and developers, who are essentially customers of the  
5 ACSA as well. She mentioned that the ACSA makes it easy for water and  
6 sewer customers to pay their bills, and it is important to think about how the  
7 organization can make it easy for contractors and builders as well.

8 Ms. Wemple stated that the sixth, and final, recommendation was to  
9 assess opportunities to attract and retain workforce, particularly in the  
10 Maintenance department. She stated that part of this is focusing on how  
11 the ACSA looks to someone in the job market. She mentioned that this  
12 may be something to think about when developing a customer  
13 communication strategy.

14 ***c. Best Practices Review Panel – Summary/Recommendations***

15 (Attached as Pages\_\_\_\_\_) Mr. O'Connell stated the Best Practices  
16 Review Panel is a combination of things that other utilities around the  
17 country practice. He stated that the ACSA conducted a Best Practices  
18 Review Panel for the last Strategic Plan and found it very effective. He  
19 stated that he would walk the Board through the process and some of the  
20 recommendations.

21 Mr. O'Connell stated that the in-person panel took place over the  
22 course of two days last fall. He stated that the goal was to conduct the  
23 panel in preparation for the new Strategic Plan for 2023-2025. He stated  
24 that three panelists were invited and attended- Brian Key, Executive  
25 Director of the Bedford Regional Water Authority, Bill Mawyer, Executive  
26 Director of the RWSA, and Phil Martin, Executive Director of the Augusta  
27 County Water Authority. He mentioned that number of ACSA staff were  
28 involved in the panel as well.

29 Mr. O'Connell stated that in terms of the panel agenda, the first day  
30 consisted of presentations and providing background information, and then  
31 follow-up conversations. He stated that the second day was focused on

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1 more strategic areas, gaps, challenges, and opportunities. He mentioned  
2 that the panel then developed takeaways and recommendations for a  
3 summary report, which is what he will be sharing with the Board today.

4 Mr. O'Connell stated that the next couple of slides show the ACSA's  
5 identified organizational gaps, challenges, and opportunities. He stated that  
6 these came out of the staff work and focus on items that the ACSA should  
7 be addressing for the next couple of years. He mentioned that some of the  
8 items have been included in the new Strategic Plan as well. He noted that  
9 some of these are items that the staff has given Board presentations about,  
10 such as the Lead Inventory and Documentation.

11 Mr. O'Connell stated that all three of the utilities that participated in the  
12 panel are similar in size, but they all do treatment which is different from  
13 the ACSA. He mentioned that a couple of them do solid waste, some have  
14 direct bill customers, and some are wholesalers. He stated that he feels  
15 they all understand the utility world, and the ACSA staff wanted to get their  
16 perspective on what it should be focusing on. He stated that he and Brian  
17 Key from Bedford would present the next portion of the presentation  
18 together. He mentioned that Mr. Key would present the summary  
19 comments on behalf of the panel, and then they would go back to the  
20 recommendations to discuss those as well.

21 Mr. Key stated that he is the Executive Director of the Bedford  
22 Regional Water Authority, or Bedford Water as they refer to themselves.  
23 He stated that Bedford Water is not only very similar in size and approach  
24 to the ACSA, but it also has similar challenges and strengths. He  
25 mentioned that he has been with Bedford Water for 23 years, and the  
26 Executive Director for 12 years, and he has seen many of the same  
27 challenges the ACSA has faced.

28 Mr. Key moved to the next slide which outlined some of the summary  
29 comments from the panel. He stated that the first comment is that the  
30 maintenance staff is amazing. He stated that they have a lot of work to do  
31 on any given day, which is difficult when you have vacancies and issues

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1 with filling them. He mentioned that they are seeing the same thing at  
2 Bedford Water.

3 Mr. Key stated that the Administration department is also amazing. He  
4 stated that Emily Roach and her team deal with public relations, human  
5 resources, and administration. He noted that their team does a lot with very  
6 few people, which ties into the customer experience. He mentioned that the  
7 panel felt there was an opportunity for some help in that department,  
8 whether internal or external. He noted, for example, that Bedford Water has  
9 a full-time employee dedicated to public relations and another that assists  
10 with that. He stated that this ties in with the third bullet point, which would  
11 be to reduce the items one department is doing, which frees up more time  
12 and enhances productivity. He added that this not only provides a better  
13 customer experience, but a better internal employee experience as well.

14 Dr. Palmer asked if Bedford Water did all its own water and sewer  
15 treatment and provided the water and sewer services. She stated, in other  
16 words, that Bedford Water is not the customer but the provider. Mr. Key  
17 replied yes, for the most part. He stated that Bedford does have  
18 agreements in place to buy water from the City of Lynchburg and Western  
19 Virginia Water Authority. He mentioned that Bedford also sells water to the  
20 Western Virginia Water Authority. He stated that Bedford is a wholesale  
21 customer and wholesale provider but does perform water treatment and  
22 sewer collection for the vast majority of its customers. Dr. Palmer asked  
23 how many connections Bedford has. Mr. Key replied that Bedford Water  
24 has 15,000 customers, serving about 32,000 people.

25 Mr. Key stated that all the ACSA's departments are very strong, and  
26 the department heads are very engaged with the community. He stated Mr.  
27 Lunsford spoke earlier about the desire for customers to have the capacity  
28 to do more online, and Bedford would like that as well.

29 Mr. Key stated that some of the training opportunities that the ACSA  
30 has such as BizLibrary and the video SOPs is great and is leading the  
31 industry on training and providing guidance and direction to its employees.

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1           Mr. Key stated that the Hydrant and Valve Maintenance program is  
2 also a leader in the industry. He stated that his wish would be for Bedford  
3 to have a person that solely maintained their fire hydrants, but currently  
4 they rely on the local fire departments. He stated that the ACSA's proactive  
5 approach to maintaining hydrants and valves is very impressive. He  
6 mentioned that valves must be exercised on a regular basis, or they will not  
7 work when you need them. He added that the Unidirectional Flushing  
8 Program is great as well to maintain the water quality at a high level.

9           Mr. Key stated that the ACSA's technology is very good. He stated that  
10 he was so impressed with the Board room setup, he spoke with April  
11 Walker, ACSA Director of IT, about how it worked. He mentioned that  
12 Bedford has now set up their board room to mirror what the ACSA does.  
13 He stated that the pandemic really drove the need for hybrid meetings, and  
14 they have become the new normal.

15           Mr. Key stated that in terms of safety, Mike Lynn, Director of  
16 Operations, does a great job. He stated that Bedford has two safety  
17 employees, one full-time and one part-time. He mentioned that he feels this  
18 is the right staff size for Bedford because they have a few more risks with  
19 the water treatment plants and wastewater plant. He noted that there may  
20 be an opportunity for the ACSA to add another safety person in the future.

21           Mr. Key stated that the ACSA has a great confined space training  
22 team. He mentioned that Bedford's full-time safety employee ensures that  
23 the organization is compliant with OSHA, which is a lot to put on someone  
24 who is trying to do taps, fix leaks, or perform preventative maintenance on  
25 the system. He stated that this is something that possibly the ACSA could  
26 have its safety employee take over in the future.

27           Mr. Key stated that the last bullet point refers to the Hydrant Meter  
28 Program. He stated that the panel thinks it is great that there are only six  
29 hydrants designated for the program. He mentioned, however, that these  
30 programs are a hassle to maintain and there is a huge liability for potential  
31 cross-connection. He noted that there is a lot of trust put into whoever is



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1 using the hydrant. He stated that Bedford Water operates on the idea that  
2 hydrants are meant for fire suppression and are not a meter system to sell  
3 water out of. He stated that it is a great service to the customer, but it  
4 comes with a fair amount of hassle and a huge risk. He added that he is  
5 not sure how, but the ACSA has navigated this very well thus far.

6 Dr. Palmer asked what Bedford does to provide water to contractors.  
7 Mr. Key replied that there are a couple of things. He stated that firstly,  
8 Bedford encourages contractors to install a frost-proof yard hydrant as a  
9 temporary connection until they get their permanent connection, which  
10 works in most cases. He stated that this does not work for something like  
11 filling a swimming pool. He mentioned that in those cases, there are two  
12 automated fill stations where customers can put in a code which will open a  
13 valve with a backflow prevention device, and they can fill up their tanks and  
14 haul it where they need to. He noted that the disadvantage to this is that  
15 there are only two filling stations and Bedford County is 765 square miles.  
16 He added that the other challenge with the fill stations is that there is only a  
17 two-inch meter in the structure that houses the backflow prevention device,  
18 which means the water flows very slowly. He stated that it would take about  
19 45 minutes to fill a tanker truck, as opposed to about 25 minutes from a fire  
20 hydrant. He added that they feel it is a good price to pay to keep the  
21 system safe and they do not have to track them down.

22 Dr. Palmer stated that Albemarle County is similar in size to Bedford.  
23 She stated that there is only one place in Albemarle County for people to  
24 empty septic systems, and there is only one commercial place to dispose  
25 of trash.

26 Mr. Key moved to the next slide, which outlined a final summary of the  
27 panel's comments. He stated that the ACSA's e-bill and e-pay systems  
28 have greatly improved in the last three years. He mentioned that when he  
29 was at the ACSA for the last panel three years ago, the organization did  
30 not have that functionality. He stated that the ACSA leadership team is very  
31 competent and collaborative. He stated that they think outside of the box,

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1 as opposed to doing things a certain way because it is the way they have  
2 always been done. He noted that this type of open approach is huge, as  
3 utilities generally tend to be very traditional. He stated that this type of  
4 thinking must change and become more customer focused. He stated that  
5 the ACSA's facilities are very nice. He stated that the panel was able to  
6 tour the building and the maintenance warehouse on their last visit, but  
7 they did see a video slide show of several of the ACSA's other facilities this  
8 time. He stated that he touched on the ACSA's technology earlier, and AMI  
9 is a huge change in three years also. He stated that Bedford Water has a  
10 combination of AMI and AMR for their system, so some of the meters are  
11 radio reads, some are drive-by, and some are older, larger meters that  
12 must be physically read. He stated that Mr. Lunsford and his staff have  
13 repeatedly won awards for the budget and GFOA awards on the audit. He  
14 stated that Bedford Water has a long history of receiving GFOA awards for  
15 their audit, but not for the budget document. He noted that it is very easy to  
16 read and understand both the ACSA's budget document and the audit  
17 report.

18 Mr. Key stated that he and Mr. O'Connell would play off each other to  
19 present the next few slides. He stated that he would go through some of  
20 the panel recommendations, and Mr. O'Connell would touch on the ACSA's  
21 follow-up comments to those recommendations. He stated that the first  
22 recommendation was a public relations staff member or consultant. He  
23 stated, as he mentioned earlier, that Bedford Water has an employee that  
24 does nothing but handle public relations. He mentioned that they post to  
25 social media about two to three times a week. He noted that this can be a  
26 challenge, but it is important to enhance the customer experience.

27 Mr. O'Connell stated that the ACSA has a contract with Water PIO,  
28 who assists with items such as newsletters, press releases, social media  
29 postings, and website postings. He stated that part of the new Strategic  
30 Plan and customer experience efforts over the next few years is to take  
31 another look at all of that and decide how to take it to the next step.

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1           Mr. Key stated that the next recommendation was for the ACSA to  
2 consider using additional consultants. He stated that the organization has a  
3 lean staff and if they cannot staff up, they can source work out to  
4 consultants.

5           Mr. O'Connell replied that this is one of the items that will be  
6 considered in the new Strategic Plan. He stated that there will be some  
7 requests before the Board soon for a few new staff members to deal with  
8 day-to-day issues, as well as some of the Strategic Plan items. He  
9 mentioned that the ACSA is also rethinking several areas currently to see if  
10 a consultant or third-party can help with some of the workload.

11          Mr. Key stated that the next recommendation was for the ACSA to  
12 designate a safety coordinator. He stated that the reason he emphasized  
13 this earlier is because Bedford Water had a chemical incident last April. He  
14 stated that a staff member was unloading a truck and unfortunately put the  
15 chemical into the wrong tank. He stated that the two chemicals mixed and  
16 created a small chlorine gas release. He noted that they have lots of SOPs  
17 in place, but staff had not been trained as well as they thought. He stated  
18 that, more importantly, there were no checks and balances in place either.

19          Mr. O'Connell replied that the ACSA plans to address this item in a  
20 couple of ways. He stated that periodically, the ACSA brings in its  
21 insurance carrier to perform safety reviews. He noted that there will be a  
22 retirement in administration within the next year or so, and the plan is to do  
23 some reorganization to have someone take on the role of safety  
24 coordinator. He mentioned that the ACSA has a strong safety culture, and  
25 the supervisors are responsible to ensure work practices are handled in a  
26 safe manner.

27          Dr. Palmer asked if, in the areas where additional staff is being  
28 recommended, the ACSA has looked at opportunities to work with the City  
29 and RWSA. Mr. O'Connell replied that the ACSA has regular conversations  
30 with RWSA, and Ms. Roach meets with their HR personnel regularly as  
31 well. He stated that RWSA does have a full-time safety employee. He

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1 mentioned that the ACSA had a conversation this week about doing a joint  
2 video with the City and RWSA on the upcoming infrastructure  
3 improvements, water quality, lead and copper, and other items.

4 Mr. Key stated that the next recommendation was about winter sewer  
5 limits and the exclusion meter program. He stated that the ACSA puts a lot  
6 of effort into adding the deduct meters and dealing with the challenges that  
7 come along with the billing. He stated that the panel felt there may be an  
8 opportunity to minimize some of that effort and still give the customer the  
9 experience of not paying for what they do not use during the winter.

10 Mr. O'Connell replied that the staff has been exploring policy  
11 alternatives. He stated that the exclusion meter project has taken a lot of  
12 time and they are looking for a different approach that will still capture the  
13 exclusion meter reading without the extensive piping.

14 Mr. Key stated that the next recommendation was to continue the  
15 good, proactive work with the CCTV program. He stated that Bedford  
16 Water does have a trailer mounted system, but the challenge is finding the  
17 staff to go out and do the work. He noted that the ACSA is doing more than  
18 most in being proactive and finding issues before they become a larger  
19 problem.

20 Mr. O'Connell replied that the staff's takeaway from this  
21 recommendation is that they need to look at the data that is being collected  
22 and how it is being managed and reported. He stated that it is amazing  
23 how the ACSA is a newer utility, but there are several issues that pop up in  
24 the sewer system. He mentioned that the organization spends a lot of time  
25 and effort on capital projects and repairs to ensure they are up to speed.  
26 Mr. Key added that the data management piece may be something that  
27 lends itself to a dashboard system. He stated that Bedford is currently  
28 evaluating one that will allow them to connect to multiple databases. He  
29 stated that it can even be taken a step further and hosted on the website so  
30 that customers can see certain information as well.

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1           Mr. Key stated that the next recommendation was to utilize a firm to  
2 assist with easement negotiations. He stated that negotiating easements is  
3 something that takes an enormous amount of time, and it is something that  
4 can be sourced out to a consultant.

5           Mr. O'Connell replied that engineering is exploring this option. Mr. Lynn  
6 added that they have developed a draft Request for Proposals (RFP) but  
7 have not made any decisions yet. Mr. O'Connell stated that one of the pros  
8 with the ACSA handling the negotiations is that the staff can address any  
9 concerns the property owner may have. He noted that the process can  
10 become long and drawn out, and sometimes outside firms can become  
11 aggressive because they want to conclude the matter. He stated that this  
12 could lead to legal action in a situation that the ACSA probably could have  
13 worked through.

14           Mr. Key stated that the next recommendation, which was a comment  
15 from Bill Mawyer, is to expand Cityworks for "life cycle" use. He stated that  
16 a life cycle analysis using the asset management system will help to put  
17 together a CIP program for pipe maintenance and replacement.

18           Mr. O'Connell replied that Cityworks has a module called Operational  
19 Insights that the ACSA is in the midst of implementing. He stated that this  
20 will be the asset management, which will include that life-cycle approach.

21           Mr. Key stated that the next recommendation, or comment, is that the  
22 ACSA is a member of Sourcwell, a cooperative procurement organization.  
23 He stated that it is a great system that Bedford uses as well. He noted that  
24 their organization just purchased a skid steer and saved about \$12,000  
25 using the cooperative procurement.

26           Mr. O'Connell replied that the ACSA also takes advantage of state  
27 contract pricing, particularly on vehicles. He stated that the organization  
28 has also been able to take advantage of contract the City of Charlottesville  
29 and Albemarle County have as well.

30           Mr. Key stated that the next recommendation was to focus on diversity.  
31 He stated that he went to San Antonio, TX this year and half of the

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1 sessions he attended had some component devoted to diversity and  
2 inclusion. He mentioned that this is a big challenge that he feels all utilities  
3 will need to address in the future.

4 Mr. O'Connell replied that part of the Strategic Plan focus will be  
5 centered around recruitment, so diversity and inclusion will be a part of that  
6 as well.

7 Mr. Key stated that the next recommendation was for the ACSA to  
8 evaluate a call-out system for outages. He stated that the staff mentioned  
9 that the ACSA was teaming up with UVA and the City of Charlottesville to  
10 discuss training or opportunities to work together. He noted that Bedford  
11 Water uses their county's emergency response system called Reverse 911  
12 that has all the customer's data. He stated that users can go into the  
13 system, draw a map around the service disruption area, and the system will  
14 call out to all the numbers in that service area.

15 Mr. O'Connell replied that the setup here is a bit different, so the staff  
16 is not sure if that would be an option. He mentioned, however, that the  
17 ACSA does want to look at some type of emergency notification and that  
18 entire process, not just the electronic notification itself. He stated that part  
19 of it will be having quality data, such as phone numbers and email  
20 addresses.

21 Mr. Key stated that one of the things he is constantly talking about is  
22 communications. He stated that his mantra is that the right information  
23 must be given to the right person at the right time, or it is useless. He  
24 stated that Bedford uses SWAY, which is an online communication tool. He  
25 mentioned that each manager types something into a newsletter every  
26 week. He stated that he reviews this and sends it out to all their Board  
27 members, employees, and stakeholders in the community. He stated that  
28 this serves as a quick snapshot of what Bedford is doing each week and is  
29 much quicker.

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1           Mr. O'Connell replied that part of the customer experience project was  
2 to look at the employee experience, which includes communication to  
3 employees.

4           Mr. Key stated that the final item was similar to the previous one, but  
5 with a focus on external communication. He stated that there are a lot of  
6 players in the community that like to be informed about what is going on,  
7 and it is important to find a vehicle to provide that information.

8           Mr. O'Connell replied that he feels the ACSA is doing this very well. He  
9 stated that there is always room for improvement, but he thinks there is a  
10 good relationship between the ACSA, RWSA, the City, and UVA.

11           Mr. O'Connell state that the next slide highlighted some of the ACSA  
12 staff's takeaways and observations from the panel. He stated that the  
13 organization is very proud of its employee group and how much they  
14 accomplish. He stated that the ACSA sees itself as a leader in best  
15 practices with the need to continue making improvements. He mentioned  
16 that there was some good discussion and the staff left feeling as if the  
17 ACSA is working on the right issues. He noted that, given the size of the  
18 staff, the challenge will be phasing all the capital projects and strategic  
19 initiatives over the next three years. He mentioned that one hope is to finish  
20 the AMI project in 2023. He stated that the staff will give the Board an  
21 update on that project next month. He noted that the delay in receiving  
22 meters slowed down the project, but the meters are now starting to show  
23 up. He stated that the ACSA will continue to assess the lean side in its  
24 staffing. He mentioned that there are a couple of new positions that will be  
25 proposed in the budget that will help with this, but it will probably be an  
26 ongoing issue. He stated that he feels the Best Practices Panel was a very  
27 effective process overall and helped the ACSA to focus strategically. He  
28 added that many of the recommendations will be included in the Proposed  
29 2023-2025 Strategic Plan.

30           Dr. Palmer stated that she wanted to thank Brian Key for taking the  
31 time to come and present with Mr. O'Connell today. Mr. Key said that he

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1 learned just as much from this process as he contributed. He stated that it  
2 has been rewarding for him to take home a lot of new ideas.

3 Dr. Palmer stated that in the beginning of the presentation, Mr. Key  
4 mentioned that Bedford Water has Board members that regularly  
5 participate in meetings virtually. She asked if the Board members that  
6 participated virtually did so because of a health or scheduling issue, or if  
7 they just decided to participate that way. Mr. Key replied that Bedford's By-  
8 Laws were revised during the pandemic to allow for virtual attendance at  
9 two (2) meetings per year for no particular reason. He noted that if there is  
10 a medical issue, the member can attend remotely as long as necessary to  
11 accommodate that. He stated that there still must be a quorum for the  
12 Board to take action on an item.

13 Mr. Moore stated that he also wanted to thank Mr. Key for joining the  
14 meeting today. He stated that the presentation was a deep dive into all the  
15 operational processes and themes. He mentioned that it did not occur to  
16 him how different service authorities would communicate and talk, and he  
17 thinks it is fantastic.

18 ***d. Discussion of Strategic Plan Process & Next Steps***

19 Mr. O'Connell stated that next month, the staff would spend some time  
20 going through the proposed Strategic Plan. He stated that the ACSA is  
21 focusing on four theme areas with the new plan – data optimization,  
22 business continuity, the customer experience, and the employee  
23 experience. He stated that on top of that, there are 12 workplan items that  
24 fall within those themes, and the thought is the staff will give quarterly  
25 reports to the Board.

26 Mr. O'Connell stated that with data optimization, the ACSA will be  
27 looking at data mapping, integration, data classification, document  
28 management system, data dashboards, and reporting. He stated that in  
29 terms of business continuity, the organization is looking at a formal  
30 business continuity plan. He mentioned that a lot of the components are in  
31 place, but the plan is not in writing. He stated that the staff will also be



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1 conducting an audit of operations, which will look at space, staffing, the use  
2 of consultants, and workloads. He stated that the customer experience  
3 includes the CX vision, new billing and phone system, website  
4 enhancements, customer engagement events, and useful customer  
5 communication. He stated that the last area is the employee experience  
6 and items such as recruitment, retention, engagement, training, and  
7 succession.

8  
9 **7. Security Assessment Updates/ IT Report**

10 April Walker, Director of IT, stated that she would begin her  
11 presentation (Attached as Pages\_\_\_\_\_) with a recap and updates since  
12 last February. She stated that in 2021, the ACSA contracted with Synigent  
13 Technologies to assess the organization's security. She stated that at that  
14 time, the ACSA adopted the Cybersecurity and Infrastructure Security  
15 Agency (CISA), AWWA, and FBI standards to follow. She mentioned that  
16 the IT staff reported its findings to the Board last February and where they  
17 were on the implementation of recommendations.

18 Ms. Walker stated that as a recap, the next slide outlines the  
19 Security Assessment. She stated that the ACSA was assessed on 102  
20 controls, based off 22 categories. She stated that the next slide shows an  
21 example of one of the categories that the ACSA was graded on, as well as  
22 the subcategories. She noted that the example in the slide is asset  
23 management, and the ACSA was graded on whether it was in place,  
24 partially in place, or not in place at all.

25 Ms. Walker stated that at the time of the assessment in June 2021,  
26 the ACSA had 32% of the controls in place, which meant there was a lot of  
27 work to be done. She mentioned that when the IT department updated the  
28 Board in February of last year, that number had increased to 67%. She  
29 noted that today, the ACSA has 94% of the controls in place.

30 Ms. Walker stated that the next slide outlines some of the  
31 recommendations that were implemented. She stated that the learning

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1 management system is BizLibrary, which the staff will be presenting on in a  
2 few months. She mentioned that the staff conducted a third-party  
3 penetration test to see if someone was able to get into the ACSA's system,  
4 which they were not. She stated that the ACSA hired an ISO Systems  
5 Engineer who handles the cybersecurity and monitoring. She noted that the  
6 ACSA updated its SCADA system, as well as its physical security system.  
7 She stated that there were also some firewall changes, multi-factor  
8 authentication was implemented, and the ACSA purchased a Security  
9 Event and Incident Management software solution (SEIM).

10 Ms. Walker stated that at the time of the assessment, the ACSA  
11 had 25% of the controls partially in place. She noted that currently, only 6%  
12 of the items are partially in place, which is due to factors such as project  
13 timelines or funding. She stated that the first of those items is data  
14 mapping, classification, and dashboarding. She stated that this is part of  
15 some projects that are included in the Strategic Plan as well as the CIP  
16 program. She stated that the Avon property development that the Board is  
17 familiar with, is currently in the design process. She stated that the firewall  
18 upgrade is one that the staff could have completed, but it was not fiscally  
19 responsible because it had just been purchased. She noted that instead,  
20 the staff just performed some firewall changes in the system.

21 Ms. Walker stated that at the time of the assessment in 2021, 43%  
22 of the controls were not in place. She stated that last February, that  
23 number was 12%, but today it is 0% as there is nothing that is not in place.  
24 She stated that the IT department has developed a multi-year Technology  
25 Plan to help them stay on goal. She stated that the plan follows the  
26 Strategic Plan and its included projects.

27 Ms. Walker stated that the next slide shows a picture of the IT staff.  
28 She stated that she wanted to give a huge thanks to Solomon Wondimu,  
29 who is the ACSA's ISO Systems Engineer. She mentioned that he did most  
30 of the cybersecurity initiatives, but the entire team was involved. She  
31 mentioned that the IT staff also could not have done it without the ACSA

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1 Lead Team who championed and supported their project. She added that  
2 she also wanted to thank the ACSA staff and the ACSA Boar for their  
3 support as well.

4 Ms. Walker stated that even though the assessment is closing out,  
5 IT's work is not done. She stated that even though the ACSA adopted new  
6 standards in 2021, the IT department has begun implementing stricter  
7 standards from the Center of Internet Security (CIS). She mentioned that  
8 the IT staff is also reviewing all its policies and updating them for  
9 enhancements. She added that the ACSA has also subscribed to several  
10 notifications, such as the most recent one yesterday for Apple devices.

11 Mr. Tolbert stated that under implemented recommendations it lists  
12 "lowered incident thresholds." He asked what type of incidents does the  
13 ACSA encounter. Ms. Walker replied that this comment refers to the  
14 firewall. She stated that the organization lowered the threshold for when it  
15 is notified. She mentioned that previously, the staff would not be notified if  
16 someone attempted to hack into the system, but it was lowered so the staff  
17 is notified if someone even attempts to get in or pings the system looking  
18 for an open port. Mr. Tolbert asked if there were people trying to get in. Ms.  
19 Walker replied yes, all the time. She stated that it heightened during the  
20 pandemic, as people were at home and bored. She noted that everyone  
21 has it happen, as hackers are just looking for open ports to get into the  
22 system.

23 Mr. Parcels asked how long and how involved the Android and  
24 Apple updates are. Ms. Walker replied that the ACSA does not have any  
25 Android devices. She stated that for mobile deployment, such as the field  
26 staff, the ACSA uses all iOS devices such as iPads and iPhones. She  
27 mentioned that the process involves collecting all of them to be updated.  
28 She noted that the ACSA does have a mobile device management (MDM)  
29 software that they are implementing. She stated that this would make the  
30 process seamless, as the updates would occur automatically. She

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1 mentioned that it is not implemented on all devices yet, so the staff did  
2 have to physically collect a lot of them to push those updates.

3 Mr. Parcels asked if Ms. Walker could explain more about the  
4 firewall update and replacement. Ms. Walker replied that at the time of the  
5 assessment, the firewall was new. She stated that the assessor was not  
6 familiar with the ACSA's firewall or its capabilities. She noted that when  
7 Solomon was hired, he had extensive knowledge about the type of firewall  
8 the ACSA has, and he was able to make it do what the assessor wanted.  
9 She mentioned that the recommendation was to replace it with a more  
10 commonly used type of firewall, and the staff is planning to do that next  
11 year. Mr. Parcels asked why the staff would want to replace it, if it now  
12 does what the ACSA needs it to do. Ms. Walker replied that it is due for  
13 replacement. She stated that the maintenance schedule is every three to  
14 five years, and the service contract will expire as well. She noted that they  
15 have the option to either renew the firewall or replace it.

16 Dr. Palmer asked why something like the firewall needs to be  
17 replaced. She asked if it becomes obsolete after a certain amount of time.  
18 Ms. Walker replied yes. She stated that it is like a phone or computer. She  
19 mentioned that after a certain point the updates and firmware are no longer  
20 available for them, and the firmware is what brings the security  
21 enhancements.

22  
23 8. Items Not on the Agenda

24 Mr. O'Connell stated that the budget process will begin next month  
25 with the presentation of the proposed CIP program. He stated that RWSA's  
26 CIP budget will be before their Board soon, which will be the biggest driver  
27 of the ACSA's budget and rates. He stated that the staff will be back in  
28 front of the Board in April to present the budget and rates. He stated that  
29 there will be a budget and rates workshop in May, followed by a public  
30 hearing and consideration of the budget and rates for adoption in June. He  
31 stated again that AMI will be starting in April, after much frustration and

**Albemarle County Service Authority Board of Directors**

1 delay. He mentioned that the staff has to perform installation of the meters  
2 and radio devices, but the goal is a mid-April startup.

3 Mr. Parcels asked if the staff would go into more detail about the  
4 lean staffing and third-party consultants when they do the initial budget  
5 presentation. Mr. O'Connell replied that the focus would probably be on the  
6 new positions that are being proposed. He mentioned that some of them  
7 relate directly to different Strategic Plan items. He stated that the ACSA  
8 has a lean staff, which is the model he comes from. He noted that it does  
9 help to keep customer rates affordable, but the ACSA wants to ensure that  
10 it provides good service with appropriate staff. He noted that regardless of  
11 the staff size, the ACSA needs to focus on the phasing of projects and  
12 ensuring staff is ready for whatever the next step is.

13 Mr. Roberts stated that when he was appointed to the Board, the  
14 strategic plan was "we do what we have to do." He stated that then along  
15 came Dr. Palmer, and the two of them worked on a committee to start this  
16 whole Strategic Plan process. He stated that it has come a long way. He  
17 stated that there is a tremendous amount of development, just on his street  
18 alone, which should help to pay for the additional staff. He thanked Mr.  
19 O'Connell and his staff for all they do.

20  
21 9. Adjourn

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

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

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

<b>AGENDA TITLE:</b> Monthly Financial Reports	<b>AGENDA DATE:</b> March 16, 2023
<b>STAFF CONTACT/PREPARER:</b> Quin Lunsford, Director of Finance	<b>ACTION:</b> Informational
	<b>ATTACHMENTS:</b> Yes

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

**DISCUSSION:**

- Water consumption for the month of January increased 2.8% compared to December. Water consumption for the month of January 2023 compared to January 2022 decreased 2.4%.
- RWSA's invoice of \$1,990,411 for the month of January was paid on February 7, 2023.
- Unearned water and sewer connection charges totaled \$2,108,798 at month end.
- System connection charges were above budgeted expectations with \$846,435 recognized in January. Total system connection charges for FY 2023 are more than those in FY 2022 by 14%.
- Water and Wastewater revenues for FY 2023 are below budgeted expectations by 1.0%. Please see the water/wastewater trend analysis included illustrating that when adjustment for expected variations in seasonal consumption are considered, revenues are 2.6% lower than budgeted expectations.
- The ACSA has received nearly \$30,000 for 54 ACSA customers that have submitted applications and requested assistance through the LIHWAP program for qualifying arrearages.
- Southwood Mobile Home Park Update – The private Southwood sewer flow meter began registering higher than expected flows in April 2021. Subsequent months continued to reflect readings considerably higher than metered water flows. As this is a private meter, it was Southwood's responsibility to replace and the installation/calibration was completed in May 2022. From April 2021 through May 2022, the failing sewer meter registered on average 175% more sewer flows than metered water. The ACSA monitored flows on the newly installed sewer meter for multiple months and assessed trends to estimate actual flows from April 2021 through May 2022. This analysis resulted in suspected over reported wastewater volume of 12,467,285 gallons during this time. Habitat for Humanity is responsible for this account and paid all charges related to the originally reported sewer flows. Based on ACSA calculations, reimbursement to Habitat of \$125,595.96 was prepared and remitted on March 1, 2023.

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

**BUDGET IMPACT:** Informational only.

**RECOMMENDATIONS:** None

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

**ATTACHMENTS:**

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

## ALBEMARLE COUNTY SERVICE AUTHORITY

## STATEMENT OF NET POSITION

February 28, 2023

## ASSETS

Cash and cash equivalents	\$ 12,093,020
Accounts receivable	4,326,900
Investments	43,089,043
Capital assets: (net of accumulated depreciation)	177,758,670
Inventory	535,215
Prepays	78,827
Cash and cash equivalents, restricted	496,436
	<hr/>
Total assets	238,378,111
	<hr/>

## DEFERRED OUTFLOWS OF RESOURCES

Combined deferred outflows of resources	1,174,141
	<hr/>

## LIABILITIES

Accounts payable	2,579,355
Accrued liabilities	347,798
Compensated absences	763,469
Net pension liability	695,494
Other post-employment benefits	1,144,368
Unearned connection fees	2,108,798
Long-term debt	4,669,118
	<hr/>
Total liabilities	12,308,400
	<hr/>

## DEFERRED INFLOWS OF RESOURCES

Combined deferred inflows of resources	2,880,258
	<hr/>

## NET POSITION

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224,363,594

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ALBEMARLE COUNTY SERVICE AUTHORITY  
For the One Month Ending February, 2023

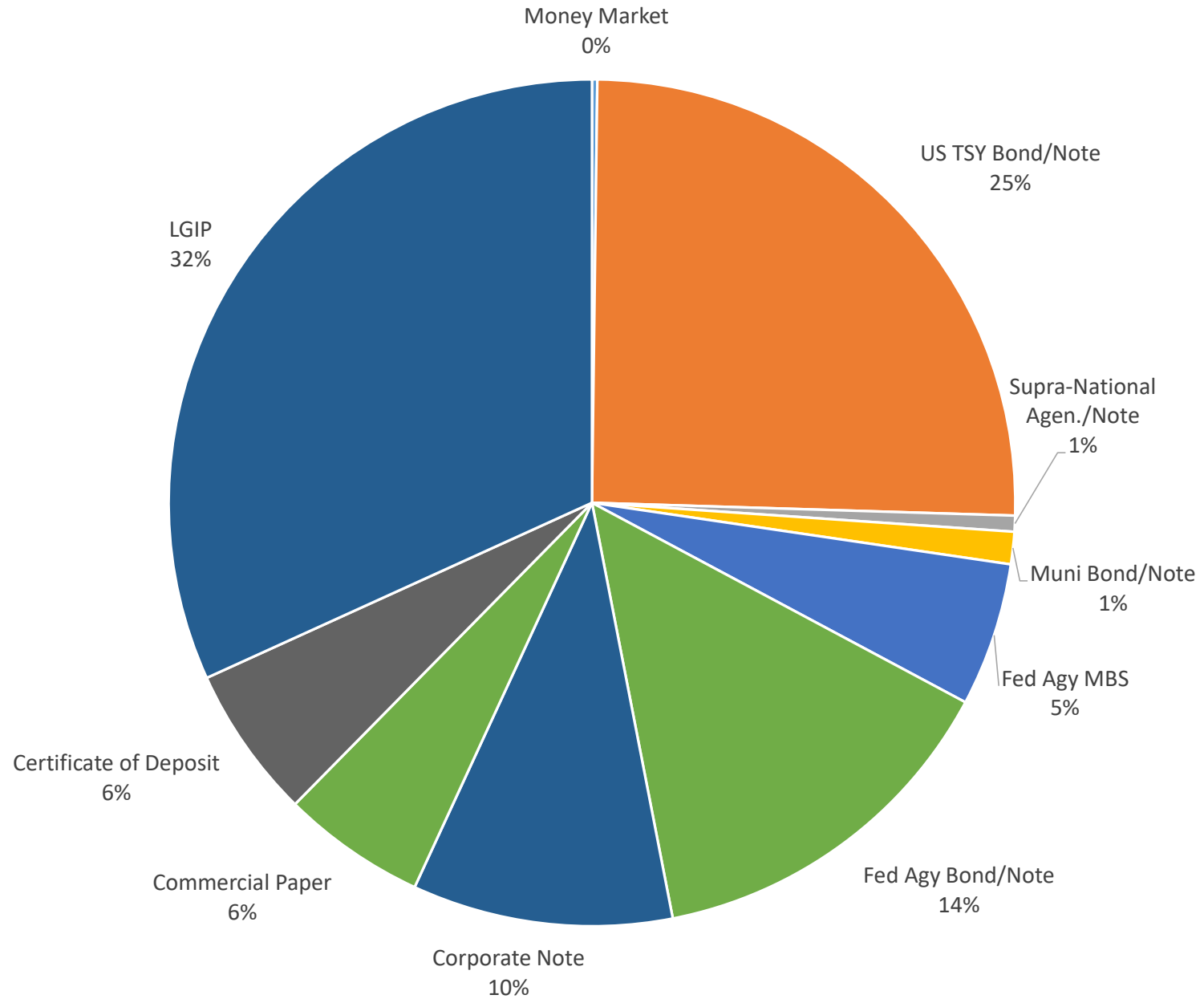
36

	Budget FY 2023	Budget Year-to-Date 2023	February Actual Year-to-Date	Actual vs. Budget	Variance Percentage
<b>Revenues</b>					
Water Sales	19,285,000.	12,856,667.	12,524,303.	(332,364.)	(2.59%)
Sewer Service	15,137,000.	10,091,333.	10,191,564.	100,231.	0.99%
<b>Total operating revenues</b>	<b>34,422,000.</b>	<b>22,948,000.</b>	<b>22,715,867.</b>	<b>(232,133.)</b>	<b>(1.01%) A</b>
<b>Operating Expenses</b>					
Purchase of bulk water	(13,774,000.)	(9,182,667.)	(9,300,532.)	(117,865.)	1.28% B
Purchase of sewer treatment	(10,776,000.)	(7,184,000.)	(6,859,497.)	324,503.	(4.52%) B
Administration	(1,306,475.)	(870,983.)	(818,797.)	52,186.	(5.99%) C
Finance	(2,516,082.)	(1,677,388.)	(1,578,229.)	99,159.	(5.91%) C
Information Technology	(1,521,900.)	(1,014,600.)	(909,621.)	104,979.	(10.35%) C
Engineering	(2,289,721.)	(1,526,481.)	(1,443,853.)	82,628.	(5.41%) C
Maintenance	(4,726,083.)	(3,150,722.)	(2,526,005.)	624,717.	(19.83%) C
<b>Total operating expenses</b>	<b>(36,910,261.)</b>	<b>(24,606,841.)</b>	<b>(23,436,534.)</b>	<b>1,170,307.</b>	<b>(4.76%)</b>
<b>Operating gain(loss)</b>	<b>(2,488,261.)</b>	<b>(1,658,841.)</b>	<b>(720,667.)</b>	<b>938,174.</b>	<b>(56.56%)</b>
<b>Nonoperating Revenues</b>					
System connection charges	5,926,800.	3,951,200.	6,534,056.	2,582,856.	65.37% D
Investment/Interest Income	100,000.	66,667.	386,373.	319,706.	479.56% E
Rental income	16,000.	10,667.	9,724.	(943.)	(8.84%)
Miscellaneous revenues	455,000.	303,333.	509,543.	206,210.	67.98% F
<b>Total nonoperating revenues (expenses)</b>	<b>6,497,800.</b>	<b>4,331,867.</b>	<b>7,439,696.</b>	<b>3,107,829.</b>	<b>71.74%</b>
<b>Nonoperating Expenses</b>					
Miscellaneous expenses	(434,200.)	(289,467.)	(244,271.)	45,196.	(15.61%) G
Bond interest charges	(162,272.)	(108,181.)	(106,600.)	1,581.	(1.46%) H
Depreciation	0.	0.	(2,793,120.)	(2,793,120.)	0.00% I
<b>Total nonoperating revenues (expenses)</b>	<b>(596,472.)</b>	<b>(397,648.)</b>	<b>(3,143,991.)</b>	<b>(2,746,343.)</b>	<b>690.65%</b>
<b>Capital contributions</b>	<b>0.</b>	<b>0.</b>	<b>699,337.</b>	<b>699,337.</b>	<b>0.00%</b>
<b>Change in Net Position</b>	<b>3,413,067.</b>	<b>2,275,378.</b>	<b>4,274,375.</b>	<b>1,998,997.</b>	<b>87.85%</b>

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

- A.** Water and sewer revenues were less than budgeted amounts by 1.01%. Consumption through February (gallons) appears reasonable considering the ACSA's normal seasonal consumption pattern. Further information related to seasonal revenue expectations can be found later in the Board packet.
- B.** Expenses related to purchases of bulk water and sewer treatment from the RWSA are less than budgeted amounts by 1.26%. 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.
- D.** System connection charges are higher than the prorated 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 **February 28, 2023**

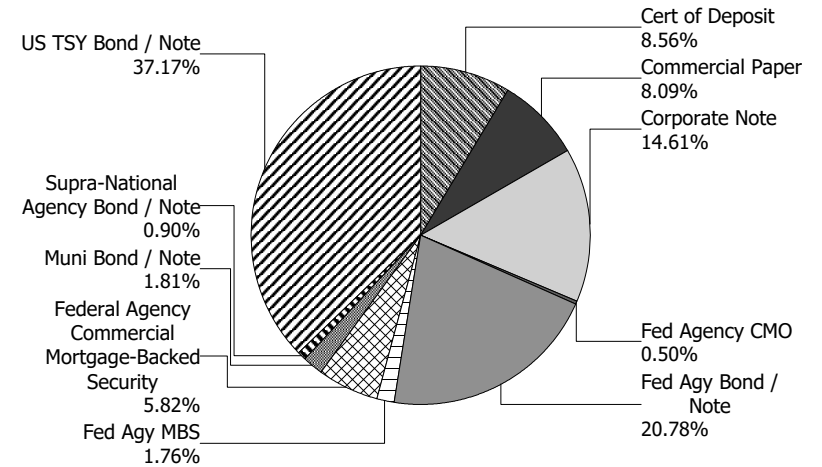
ACSA OPERATING FUNDS - 03100100

### Account Summary

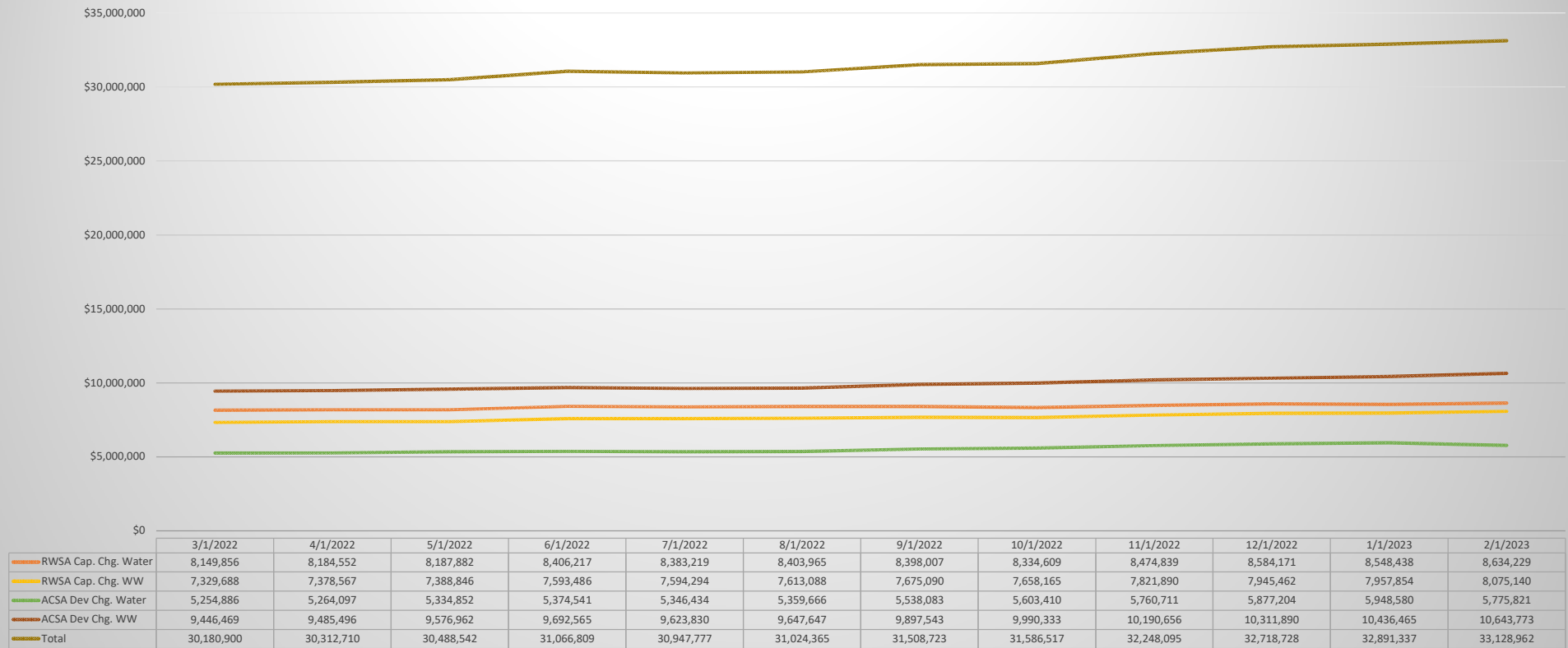
Description	Par Value	Market Value	Percent
U.S. Treasury Bond / Note	11,480,000.00	10,895,984.43	37.17
Supra-National Agency Bond / Note	265,000.00	262,391.34	0.90
Municipal Bond / Note	550,000.00	530,469.50	1.81
Federal Agency Mortgage-Backed Security	555,434.21	515,122.05	1.76
Federal Agency Commercial Mortgage-Backed Security	1,758,684.95	1,705,279.35	5.82
Federal Agency Collateralized Mortgage Obligation	150,000.00	145,685.51	0.50
Federal Agency Bond / Note	6,235,000.00	6,091,396.52	20.78
Corporate Note	4,400,000.00	4,281,091.55	14.61
Commercial Paper	2,400,000.00	2,371,498.80	8.09
Certificate of Deposit	2,525,000.00	2,509,989.92	8.56
<b>Managed Account Sub-Total</b>	<b>30,319,119.16</b>	<b>29,308,908.97</b>	<b>100.00%</b>
Accrued Interest		129,721.27	
<b>Total Portfolio</b>	<b>30,319,119.16</b>	<b>29,438,630.24</b>	

<b>Unsettled Trades</b>	<b>185,000.00</b>	<b>184,107.01</b>
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### 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**  
**January 2023**

41

Area	January 2023 Monthly Connection Fees	January 2022 Monthly Connection Fees	\$ Change	% Change
Crozet	\$ 53,880	\$ 60,530	\$ (6,650)	-11%
Urban	792,555	215,435	577,120	268%
Scottsville	-	-	-	-
<b>Total Connection fees</b>	<b>\$ 846,435</b>	<b>\$ 275,965</b>	<b>\$ 570,470</b>	<b>207%</b>
<b>Through January</b>				
Area	YTD FY 2023 Connection Fees	YTD FY 2022 Connection Fees	\$ Change	% Change
Crozet	\$ 990,045	\$ 787,910	\$ 202,135	26%
Urban	4,565,570	4,104,535	461,035	11%
Scottsville	-	-	-	-
<b>Total Connection fees</b>	<b>\$ 5,555,615</b>	<b>\$ 4,892,445</b>	<b>\$ 663,170</b>	<b>14%</b>

Area	January 2023 ERC's	January 2022 ERC's	Change	% Change
Crozet	4	5	(1)	-20%
Urban	59	17	42	247%
Scottsville	-	-	-	-
<b>Total ERC's</b>	<b>63</b>	<b>22</b>	<b>41</b>	<b>186%</b>
<b>Through January</b>				
Area	YTD FY 2023 ERC's	YTD FY 2022 ERC's	Change	% Change
Crozet	74	59	15	25%
Urban	339	305	34	11%
Scottsville	-	-	-	-
<b>Total ERC's - YTD</b>	<b>413</b>	<b>364</b>	<b>49</b>	<b>13%</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  
January 2023**

<b>Area</b>	<b>January 2023 ERC's</b>	<b>January 2022 ERC's</b>	<b>January 2021 ERC's</b>
<b>Crozet</b>	4	5	11
<b>Urban</b>	59	17	38
<b>Scottsville</b>	-	-	-
<b>Total ERC's</b>	63	22	49

<b>Through January</b>			
<b>Area</b>	<b>YTD 2023 ERC's</b>	<b>YTD 2022 ERC's</b>	<b>YTD 2021 ERC's</b>
<b>Crozet</b>	74	59	128
<b>Urban</b>	339	305	299
<b>Scottsville</b>	-	-	-
<b>Total ERC's - YTD</b>	413	364	427

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 2023**

	<b>FY 2023</b>	<b>FY 2022</b>	<b>Increase</b>	
	<b>RWSA Charges</b>	<b>RWSA Charges</b>	<b>(Decrease)</b>	
<b>July</b>	\$ 2,041,957	\$ 1,813,287	\$ 228,671	12.61%
<b>August</b>	\$ 2,042,399	\$ 1,826,679	\$ 215,720	11.81%
<b>September</b>	\$ 2,083,284	\$ 1,818,536	\$ 264,748	14.56%
<b>October</b>	\$ 2,021,265	\$ 1,854,295	\$ 166,970	9.00%
<b>November</b>	\$ 1,987,793	\$ 1,789,319	\$ 198,474	11.09%
<b>December</b>	\$ 2,025,214	\$ 1,743,520	\$ 281,694	16.16%
<b>January</b>	\$ 1,990,411	\$ 1,808,835	\$ 181,576	10.04%
<b>February</b>	\$ 1,956,978	\$ 1,764,098	\$ 192,880	10.93%
<b>March</b>		\$ 1,847,231		-100.00%
<b>April</b>		\$ 1,820,145		-100.00%
<b>May</b>		\$ 1,863,638		-100.00%
<b>June</b>		\$ 1,812,590		-100.00%
	<b>\$ 16,149,301</b>	<b>\$ 21,762,171</b>		
<b>YTD</b>	<b>\$ 16,149,301</b>	<b>\$ 14,418,567</b>	<b>\$ 1,730,734</b>	<b>12.00%</b>

**Note: The charges noted above from the RWSA include operating and debt service charges for water and sewer treatment by month.**



**Albemarle County Service Authority  
Consumption Analysis  
Fiscal Year 2023**

	FY 2023 Consumption	FY 2022 Consumption		Monthly Precipitation (In.)	
				FY 2023	FY 2022
July	155,932,214	162,247,194	-3.89%	6.42	2.30
August	159,969,362	183,549,927	-12.85%	4.10	4.60
September	155,676,979	167,986,757	-7.33%	2.79	5.46
October	152,513,014	159,438,005	-4.34%	2.24	5.26
November	148,761,821	148,641,595	0.08%	4.52	1.01
December	134,997,083	140,551,064	-3.95%	4.60	0.26
January	138,803,649	142,192,560	-2.38%	2.32	4.04
February		127,434,073	-100.00%		1.81
March		131,636,356	-100.00%		3.50
April		135,122,656	-100.00%		3.23
May		144,519,955	-100.00%		6.04
June		150,608,842	-100.00%		4.11
	1,046,654,122	1,793,928,984		26.99	41.62
<b>YTD</b>	1,046,654,122	1,104,607,102	-5.25%	26.99	22.93

**Note:** Consumption through January 2023 is 5.25% less than the same period in fiscal year 2022. Monthly precipitation figures have been included for comparison purposes. Trends in rainfall can sometimes correlate with trends in consumption however, depending on the intensity, days between rain events, or other factors, this may not always be the case.

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

# Albemarle County Service Authority

Serving • Conserving

## Water and Sewer Report

(Volumes in Gallons)

January 2023

<b>Billed by Area:</b>	<b>Water</b>	<b>Sewer</b>
Crozet	16,313,841	15,405,252
Scottsville	873,832	754,737
Urban	121,580,989	109,216,279
Red Hill	34,987	0
<b>Total</b>	<b>138,803,649</b>	<b>125,376,268</b>

<b>Billing by Sewer Plant:</b>	
AWT	124,621,531
less Glenmore	(3,705,620)
Urban Total	120,915,911
Scottsville	754,737
<b>Total</b>	<b>121,670,648</b>

<b>Number of Installed Meters:</b>	
Urban	20
Crozet	1
Scottsville	0
<b>Total</b>	<b>21</b>

<b>Metered Consumption (billed by invoice):</b>	
Urban	165,900
Crozet	0
Scottsville	0
<b>Total</b>	<b>165,900</b>

<b>Unmetered Consumption:</b>	
ACSA Fire Flow Consump.	Urban 51,745
<b>Total</b>	<b>51,745</b>

<b>Unmetered Leak Consumption:</b>	
5599 St George Ave-1/9	Crozet 100
<b>Total</b>	<b>100</b>

### Billed Consumption for Selected Customers

	<u>Water</u>	<u>Sewer</u>		<u>Water</u>	<u>Sewer</u>
*Virginia Land Holding	332,028	332,028	Boar's Head Inn	390,531	366,531
Southwood Mobile Homes	1,774,290	2,130,000	Farmington Inc.	443,185	405,816
Turtle Creek Apts.	1,396,654	1,395,854	Westgate Apts.	1,126,854	1,126,854
Barracks West Apartments	1,549,500	1,549,500	Abbingdon Crossing	1,871,612	1,871,612
Monroe Health & Rehab.	947,459	947,459	Four Seasons Apts	1,714,618	1,714,618
Sunrise Senior "Colonnades"	658,665	654,465	Ch'ville/Alb Airport	95,864	97,080
ACRJ	1,047,840	1,042,840	State Farm	1,158,860	1,158,860
Westminster Canterbury	1,197,100	1,197,100	Hyatt @ Stonefield	334,121	334,121
SEMF Charleston	1,468,633	1,468,633	Doubletree	481,364	481,364
Martha Jefferson Hospital	1,361,249	1,214,549	Arden Place Apts	439,518	439,518
Crozet Mobile Home Village	278,300	278,300	Hilton Garden Inn	182,275	182,275
The Home Depot	206,329	206,329	The Blake & Charlottesville	309,310	309,310
County of Albemarle	1,232,730	1,181,824	The Lodge @ Old Trail	250,660	250,660
University of Virginia	1,081,805	1,075,477	Gov't-Defense Complex	617,596	617,595
Wegmans	362,875	362,875	Harris Teeter Stores	104,727	104,727

\* indicates Industrial Discharge Permit Holders

January 2023

## WATER

Class Type	Number of Connections by Area			Total
	Urban	Crozet	Scottsville	
Single-Family Residential	15,789	3,753	196	19,738
Multi-Family Residential	559	43	3	605
Commercial (Offices)	202	12	5	219
Commercial (Other)	925	76	52	1,053
Industrial	36	11	4	51
Institutional	171	32	12	215
<b>Total Water Accounts</b>	<b>17,682</b>	<b>3,927</b>	<b>272</b>	<b>21,881</b>
<b>Plus Multiple Units</b>	<b>12,940</b>	<b>748</b>	<b>89</b>	<b>13,777</b>
<b>Total Water Units</b>	<b>30,622</b>	<b>4,675</b>	<b>361</b>	<b>35,658</b>

## SEWER

Class Type	Number of Connections by Area			Total
	Urban	Crozet	Scottsville	
Single-Family Residential	13,478	3,476	158	17,112
Multi-Family Residential	528	41	4	573
Commercial (Offices)	186	12	5	203
Commercial (Other)	719	52	44	815
Industrial	15	5	1	21
Institutional	133	25	10	168
<b>Total Sewer Accounts</b>	<b>15,059</b>	<b>3,611</b>	<b>222</b>	<b>18,892</b>
<b>Plus Multiple Units</b>	<b>12,523</b>	<b>745</b>	<b>56</b>	<b>13,324</b>
<b>Total Sewer Units</b>	<b>27,582</b>	<b>4,356</b>	<b>278</b>	<b>32,216</b>

## 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
<b>Total Water Customers</b>	71,823	11,253	713	83,788
<b>Total Sewer Customers</b>	65,003	10,553	535	76,090

**Albemarle County Service Authority  
Major Customer Analysis  
January 2023 and December 2022**

	<b>January 2023</b>		<b>December 2022</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>
<b>Turtle Creek Apts.</b>	1,396,654	1,395,854	1,220,121	1,219,321	14.47%	14.48%
<b>ACRJ</b>	1,047,840	1,042,840	919,660	869,660	13.94%	19.91%
<b>Southwood Mobile Homes</b>	1,774,290	2,130,000	1,578,480	2,230,000	12.40%	-4.48%
<b>County of Albemarle</b>	1,232,730	1,181,824	1,108,766	998,477	11.18%	18.36%
<b>Barracks West Apartments</b>	1,549,500	1,549,500	1,460,500	1,460,500	6.09%	6.09%
<b>Four Seasons Apts.</b>	1,714,618	1,714,618	1,762,958	1,762,958	-2.74%	-2.74%
<b>Abbingtion Crossing</b>	1,871,612	1,871,612	1,949,731	1,949,731	-4.01%	-4.01%
<b>Westmisnster Canterbury</b>	1,197,100	1,197,100	1,289,260	1,228,260	-7.15%	-2.54%
<b>SEMF Charleston</b>	1,468,633	1,468,633	1,592,486	1,592,486	-7.78%	-7.78%
<b>University of Virginia</b>	1,081,805	1,075,477	1,178,567	1,176,310	-8.21%	-8.57%
<b>Westgate Apts.</b>	1,126,854	1,126,854	1,277,915	1,277,915	-11.82%	-11.82%
<b>Martha Jefferson Hospital</b>	1,361,249	1,214,549	1,587,543	1,296,543	-14.25%	-6.32%

**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  
January 2023 and January 2022**

	January 2023		January 2022		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
<b>County of Albemarle</b>	1,232,730	1,181,824	613,437	583,337	100.95%	102.60%
<b>Four Seasons Apts.</b>	1,714,618	1,714,618	1,569,000	1,569,000	9.28%	9.28%
<b>Southwood Mobile Homes</b>	1,774,290	2,130,000	1,647,000	5,064,841	7.73%	-57.95%
<b>Martha Jefferson Hospital</b>	1,361,249	1,214,549	1,310,093	1,087,093	3.90%	11.72%
<b>Westmisnster Canterbury</b>	1,197,100	1,197,100	1,190,390	1,190,390	0.56%	0.56%
<b>Turtle Creek Apts.</b>	1,396,654	1,395,854	1,476,100	1,475,000	-5.38%	-5.37%
<b>Abbingtion Crossing</b>	1,871,612	1,871,612	1,981,400	1,981,400	-5.54%	-5.54%
<b>Barracks West Apartments</b>	1,549,500	1,549,500	1,659,000	1,659,000	-6.60%	-6.60%
<b>ACRJ</b>	1,047,840	1,042,840	1,248,440	1,212,440	-16.07%	-13.99%
<b>Westgate Apts.</b>	1,126,854	1,126,854	1,389,000	1,389,000	-18.87%	-18.87%
<b>SEMF Charleston</b>	1,468,633	1,468,633	1,835,325	1,835,325	-19.98%	-19.98%
<b>University of Virginia</b>	1,081,805	1,075,477	1,546,760	1,456,100	-30.06%	-26.14%

**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 -- January**

	YTD FY 2023		YTD FY 2022		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
<b>Four Seasons Apts.</b>	11,945,002	11,945,002	11,151,000	11,151,000	7.12%	7.12%
<b>Abbingdon Crossing</b>	13,076,021	13,076,021	12,520,600	12,520,600	4.44%	4.44%
<b>Martha Jefferson Hospital</b>	14,566,331	8,003,127	14,067,126	7,495,026	3.55%	6.78%
<b>Barracks West Apartments</b>	10,426,600	10,426,600	10,383,300	10,383,300	0.42%	0.42%
<b>Westgate Apts.</b>	8,771,430	8,765,130	8,758,000	8,749,000	0.15%	0.18%
<b>Turtle Creek Apts.</b>	8,818,709	8,791,809	9,107,300	9,099,000	-3.17%	-3.38%
<b>County of Albemarle</b>	9,426,172	7,661,867	10,019,063	7,716,963	-5.92%	-0.71%
<b>Southwood Mobile Homes</b>	12,434,025	15,010,000	13,324,000	27,426,391	-6.68%	-45.27%
<b>Westmisnster Canterbury</b>	10,310,650	9,726,650	11,778,770	10,206,770	-12.46%	-4.70%
<b>University of Virginia</b>	12,807,919	12,776,595	17,182,180	16,800,593	-25.46%	-23.95%
<b>ACRJ</b>	7,709,210	6,693,210	10,711,630	9,674,630	-28.03%	-30.82%
<b>SEMF Charleston</b>	10,135,420	10,135,420	15,159,175	15,159,175	-33.14%	-33.14%

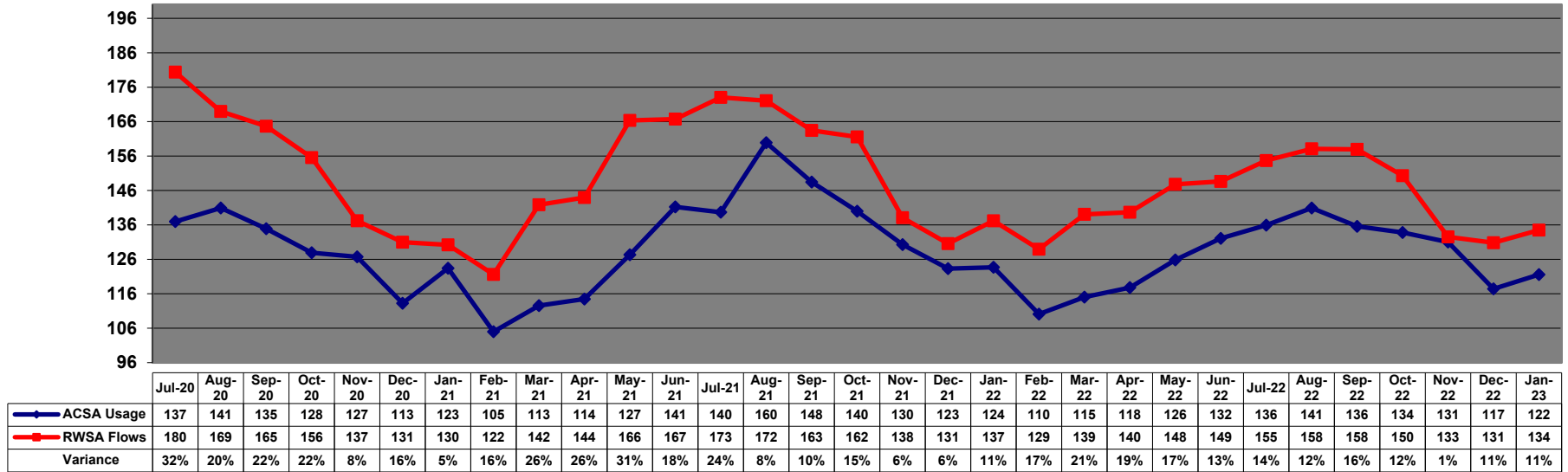
**Note: Only major customers of the ACSA have been analyzed above. For purposes of this analysis, major customers are those who, on average, consume over one million gallons per month. Variations can occur for a variety of reasons including but not limited to: conscious conservation efforts, expansion,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

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

# FY 2021, 2022, and 2023 Urban Water Comparison RWSA Flows & ACSA Customer Usage

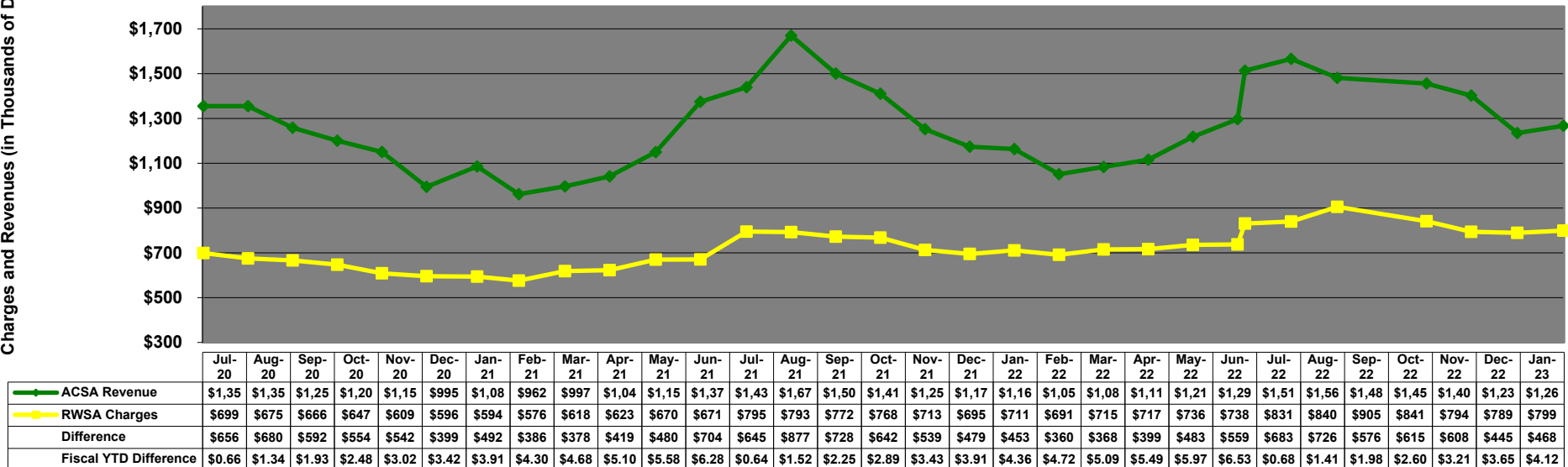
50

Flows & Usage (in Millions of Gallons)



Charges and Revenues (in Thousands of Dollars)

## FY 2021, 2012, and 2023 Urban Water Comparison RWSA Billed Water Charges & ACSA Billed Water Revenues

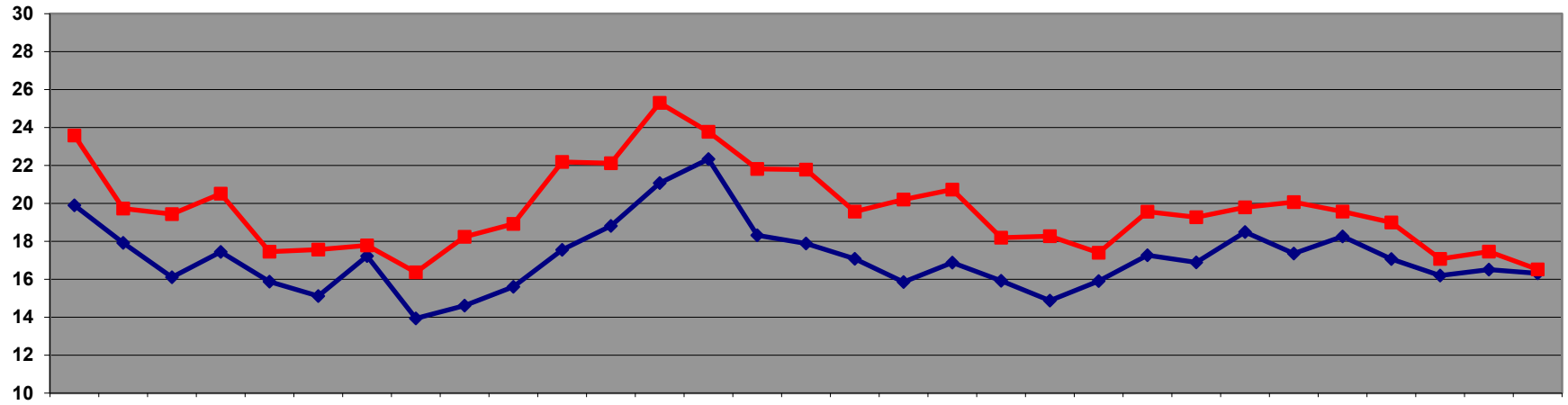


Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

# FY 2021, 2022, and 2023 Crozet Water Comparison RWSA Flows & ACSA Customer Usage

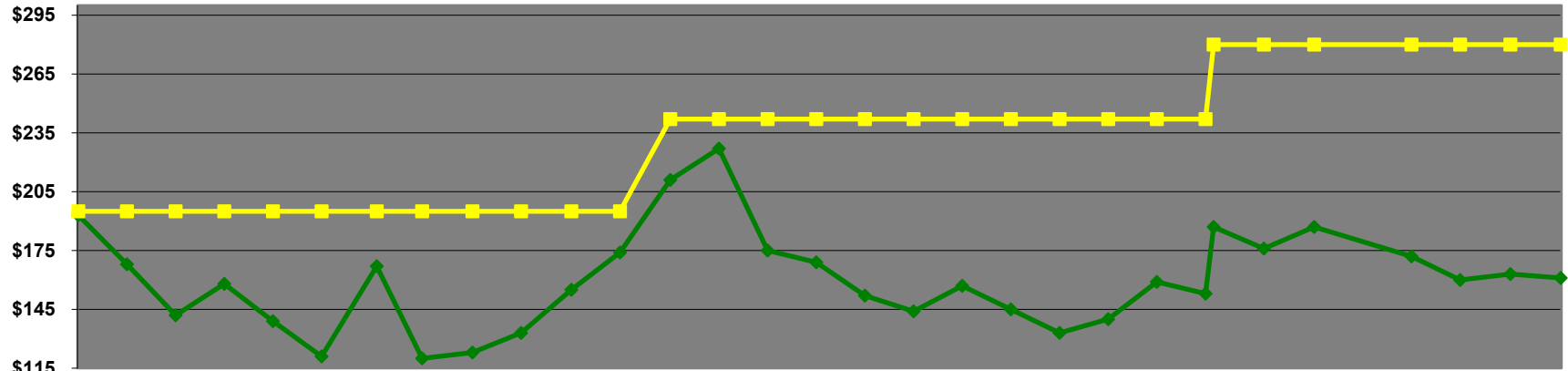
51

Flows & Usage (in Millions of Gallons)



# FY 2021, 2022, and 2023 Crozet Water Comparison RWSA Billed Water Charges & ACSA Billed Water Revenues

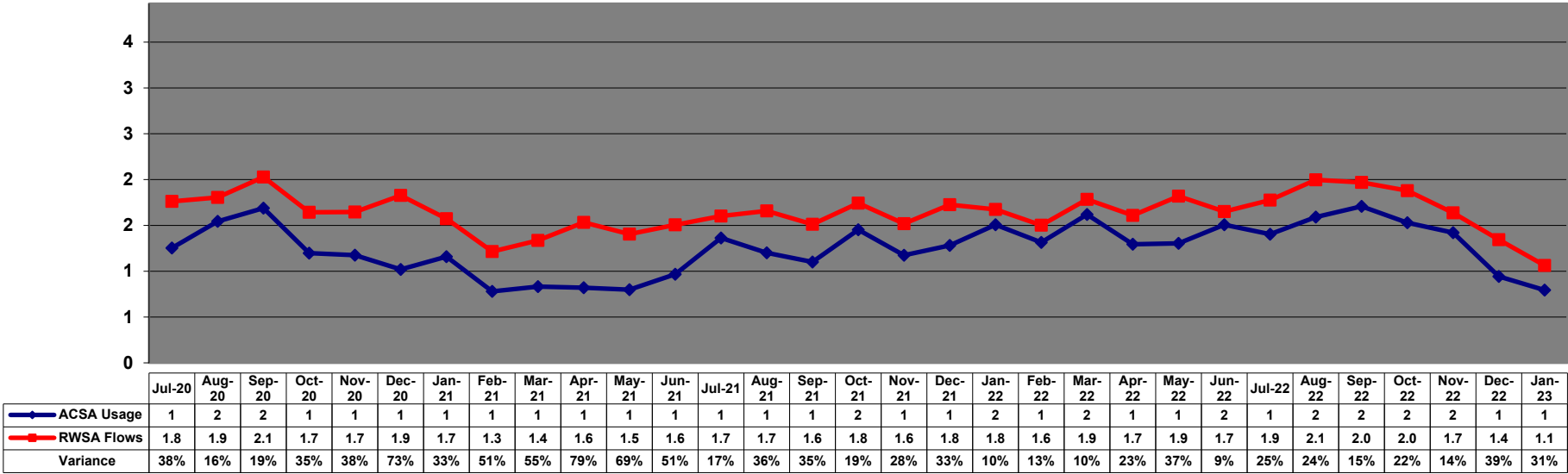
Charges and Revenues (in Thousands of Dollars)





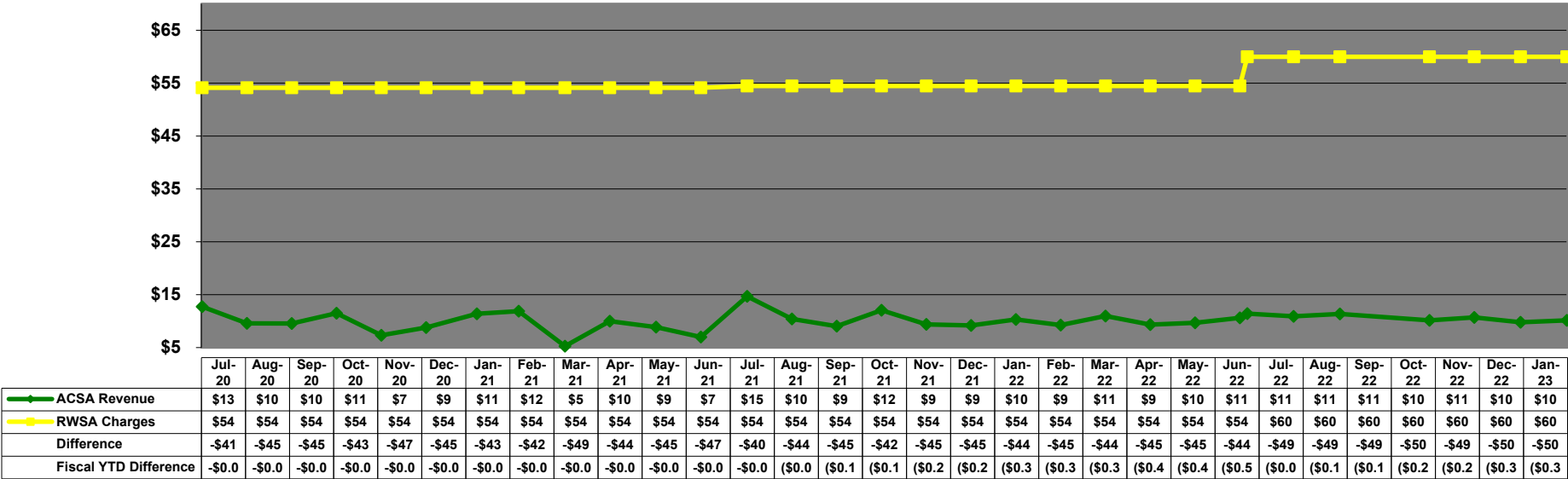
FY 2021, 2022, and 2023 Scottsville Water Comparison  
RWSA Flows & ACSA Customer Usage

Flows & Usage (in Millions of Gallons)



FY 2021, 2022, and 2023 Scottsville Water Comparison  
RWSA Billed Water Charges & ACSA Billed Water Revenues

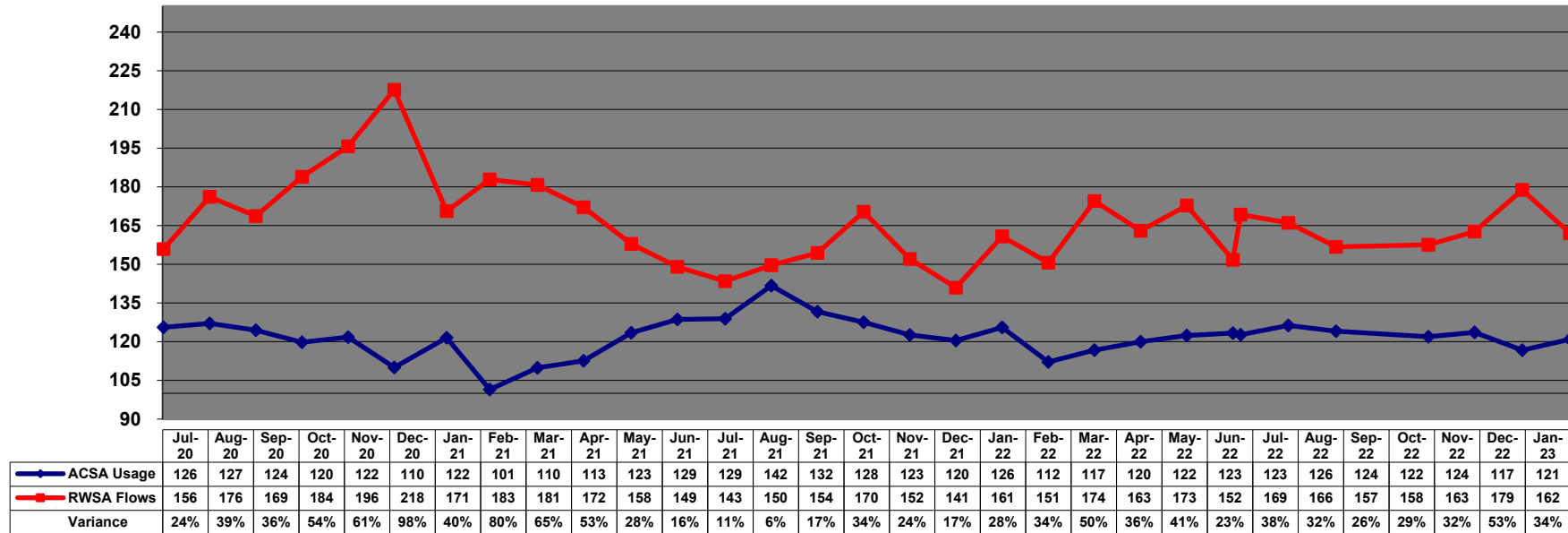
Charges and Revenues (in Thousands of Dollars)



**FY 2021, 2022, and 2023 Urban (including Glenmore) & Crozet Sewer Comparison  
ACSA Customer Usage & RWSA Flows**

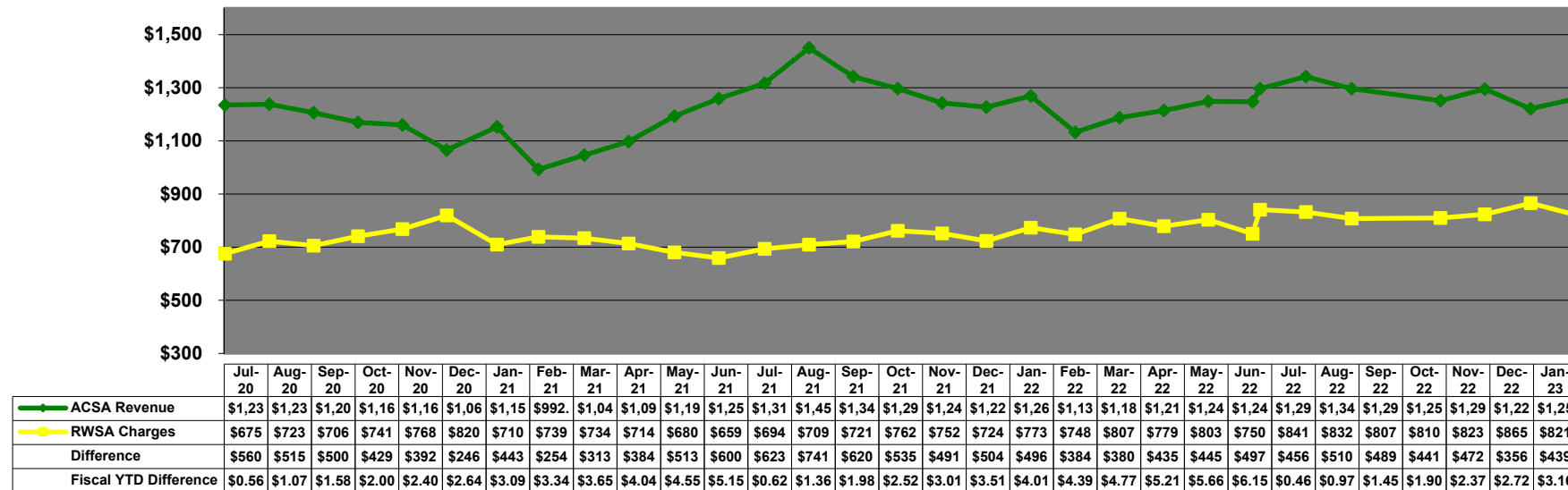
53

Usage & Flows (in Millions of Gallons)



**FY 2021, 2022, and 2023 Urban (including Glenmore) & Crozet Sewer Comparison  
ACSA Billed Sewer Usage & RWSA Billed Sewer Charges**

Charges & Revenues (in Thousands of Dollars)

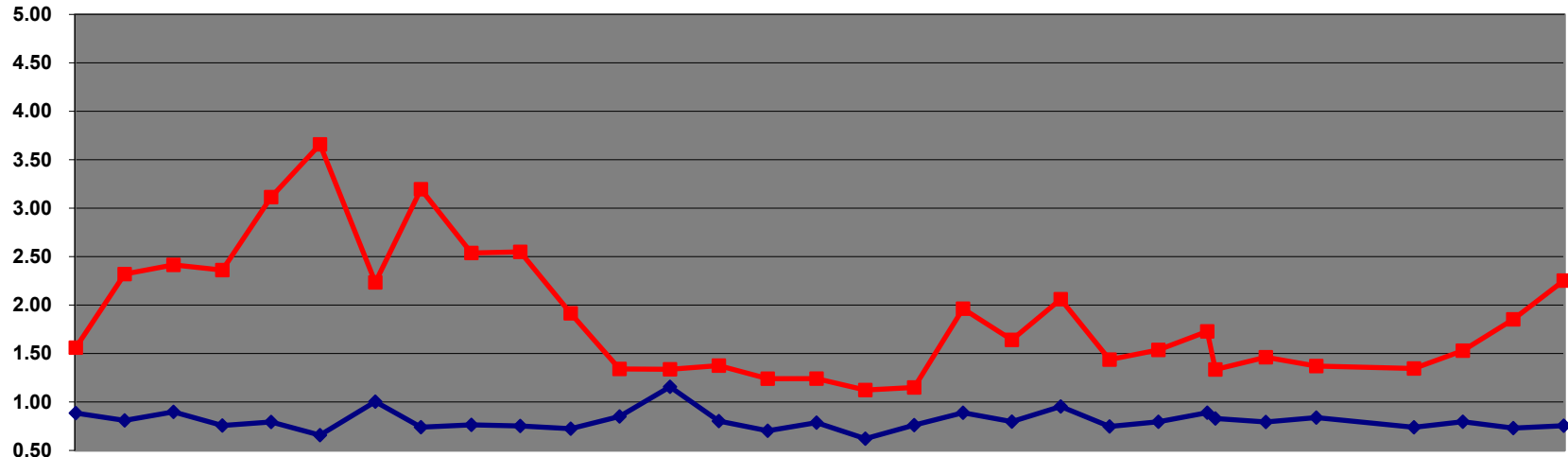


Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

**FY 2021, 2022, and 2023 Scottsville Sewer Comparison  
ACSA Customer Usage & RWSA Flows**

54

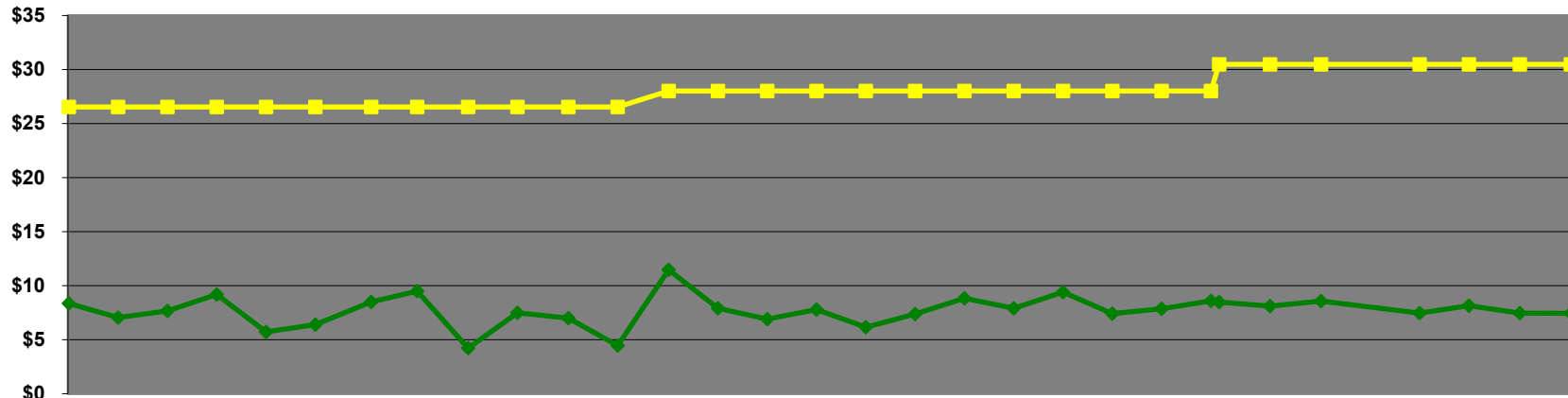
Usage & Flows (in Millions of Gallons)



	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	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
ACSA Usage	0.89	0.81	0.90	0.76	0.79	0.66	1.00	0.74	0.76	0.75	0.72	0.85	1.16	0.80	0.70	0.79	0.62	0.76	0.89	0.80	0.95	0.75	0.80	0.89	0.83	0.79	0.84	0.74	0.80	0.73	0.75
RWSA Flows	1.56	2.32	2.41	2.36	3.11	3.66	2.23	3.20	2.54	2.55	1.91	1.34	1.34	1.38	1.24	1.24	1.12	1.15	1.96	1.64	2.06	1.44	1.54	1.73	1.34	1.46	1.37	1.35	1.53	1.85	2.25
Variance	76%	187%	169%	212%	293%	457%	123%	332%	232%	239%	164%	58%	16%	71%	77%	58%	81%	51%	121%	106%	116%	92%	93%	94%	61%	84%	63%	82%	92%	154%	198%

**FY 2021, 2022, and 2023 Scottsville Sewer Comparison  
ACSA Billed Sewer Usage & RWSA Billed Sewer Charges**

Charges & Revenues (in Thousands of Dollars)



	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	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
ACSA Revenue	\$8.36	\$7.05	\$7.66	\$9.18	\$5.72	\$6.40	\$8.49	\$9.50	\$4.23	\$7.49	\$7.00	\$4.46	\$11.4	\$7.91	\$6.91	\$7.79	\$6.16	\$7.38	\$8.83	\$7.91	\$9.40	\$7.41	\$7.87	\$8.60	\$8.48	\$8.11	\$8.57	\$7.47	\$8.15	\$7.46	\$7.44
RWSA Charges	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$27	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$28	\$30	\$30	\$30	\$30	\$30	\$30	\$30
Difference	-\$18	-\$19	-\$19	-\$17	-\$21	-\$20	-\$18	-\$17	-\$22	-\$19	-\$20	-\$22	-\$17	-\$20	-\$21	-\$20	-\$22	-\$21	-\$19	-\$20	-\$19	-\$21	-\$20	-\$19	-\$22	-\$22	-\$22	-\$23	-\$22	-\$23	-\$23
Fiscal YTD Difference	-\$0.0	-\$0.0	-\$0.0	-\$0.0	-\$0.0	-\$0.1	-\$0.1	-\$0.1	-\$0.1	-\$0.1	-\$0.2	-\$0.2	-\$0.0	-\$0.0	-\$0.0	-\$0.0	-\$0.1	-\$0.1	-\$0.1	-\$0.1	-\$0.1	-\$0.2	-\$0.2	-\$0.2	-\$0.0	-\$0.0	-\$0.0	-\$0.0	-\$0.1	-\$0.1	-\$0.1

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

## Single-Family Residential Water Usage

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

	FY 2021											
	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	45,910,300	45,665,700	45,167,300	44,787,100	45,134,400	44,331,500	45,900,400	43,314,333	43,786,600	44,618,100	45,900,923	46,255,313
Level 2 (3,001 - 6,000 gallons)	21,030,200	19,112,200	17,329,000	16,285,100	16,315,200	14,519,300	18,251,700	12,572,600	13,283,000	14,314,500	17,440,134	19,373,374
Level 3 (6,001 - 9,000 gallons)	7,266,400	5,921,900	4,575,900	4,441,300	3,890,700	2,817,300	4,255,500	2,201,100	2,371,500	2,609,300	4,280,004	6,283,886
Level 4 (over 9,000 gallons)	9,237,400	7,302,100	4,762,100	4,978,000	3,886,400	1,744,700	2,307,000	1,477,100	1,583,000	1,631,400	3,370,714	7,573,293
Total	83,444,300	78,001,900	71,834,300	70,491,500	69,226,700	63,412,800	70,714,600	59,565,133	61,024,100	63,173,300	70,991,775	79,485,866

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

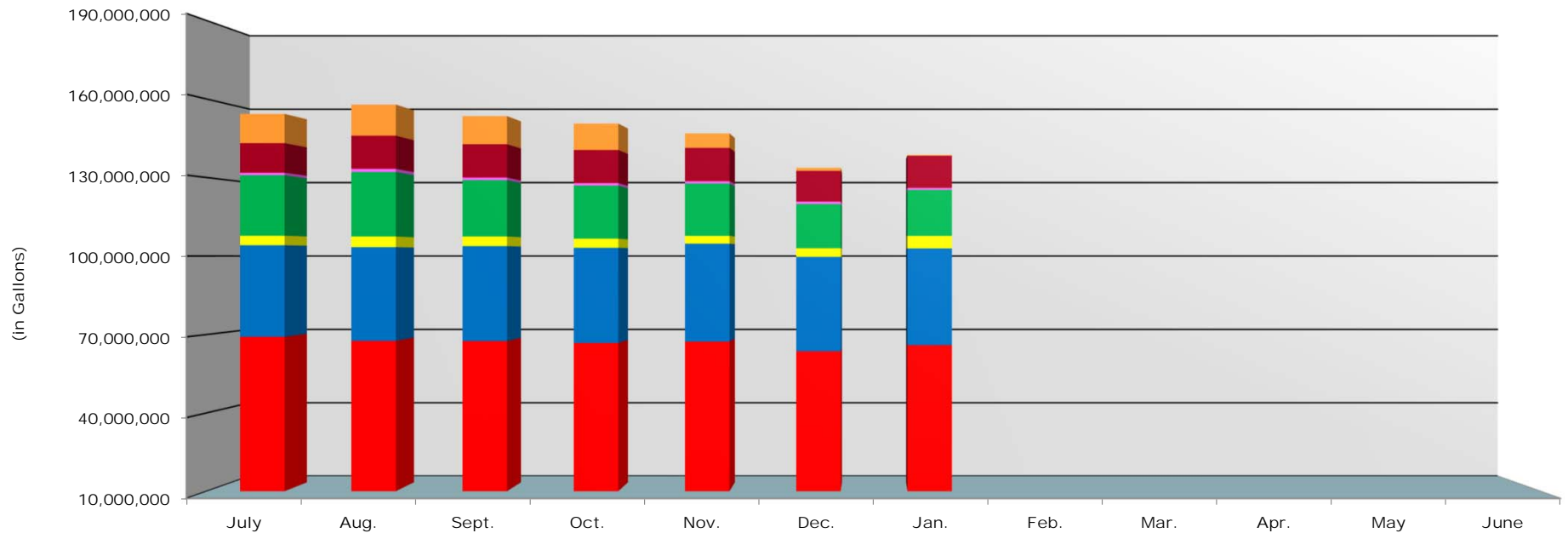
	FY 2023											
	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	45,599,911	45,505,082	45,632,349	45,357,143	45,992,076	45,339,022	45,820,263					
Level 2 (3,001 - 6,000 gallons)	16,363,636	15,612,084	15,525,446	15,374,370	15,677,968	13,744,408	14,908,443					
Level 3 (6,001 - 9,000 gallons)	4,849,724	4,363,645	4,161,371	4,369,132	3,918,235	2,545,163	2,943,662					
Level 4 (over 9,000 gallons)	7,208,522	6,639,465	6,037,842	6,071,945	4,079,700	2,079,589	2,271,075					
Total	74,021,793	72,120,276	71,357,008	71,172,590	69,667,979	63,708,182	65,943,443	-	-	-	-	-

## System-Wide Irrigation Water Usage

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

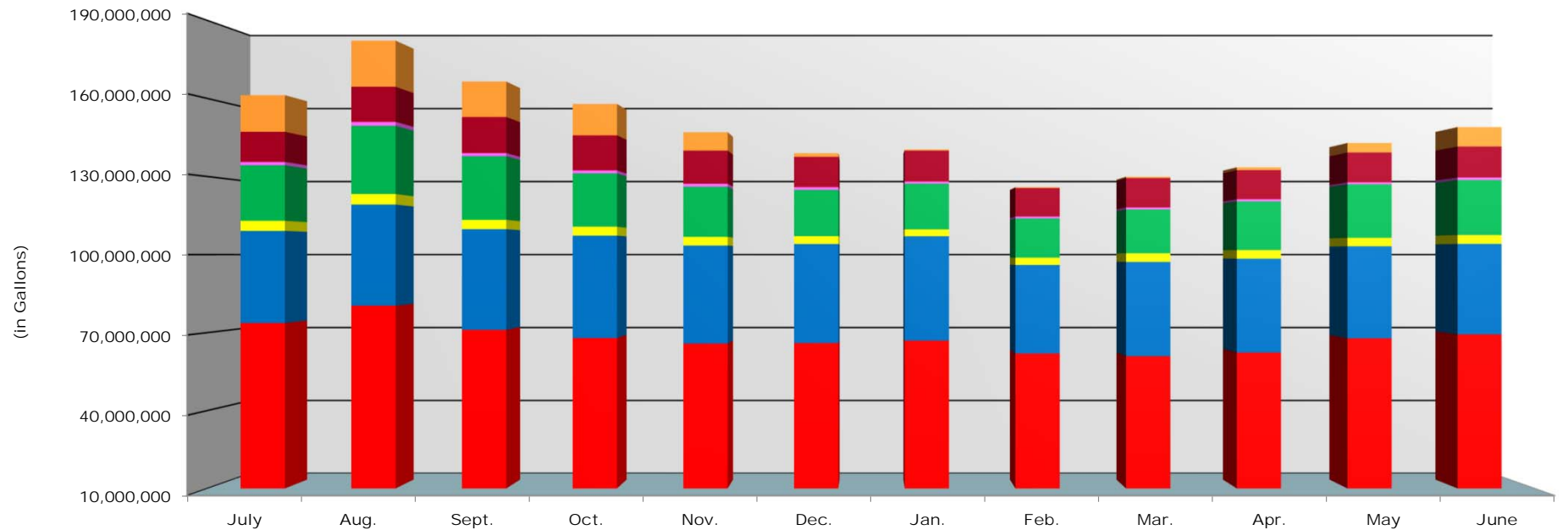
FY 2022	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	186,665	182,392	180,649	172,364	89,160	3,845	918					
Level 2 (3,001 - 6,000 gallons)	827,558	825,362	768,256	786,824	459,256	27,723	7,571					
Level 3 (6,001 - 9,000 gallons)	990,172	970,507	887,729	916,873	528,981	25,500	6,572					
Level 4 (over 9,000 gallons)	9,170,743	9,922,557	8,931,018	8,221,764	4,435,683	1,143,312	355,092					
Total	11,175,137	11,900,819	10,767,652	10,097,825	5,513,080	1,200,380	370,153	-	-	-	-	-

Monthly Water Consumption Fiscal Year 2023

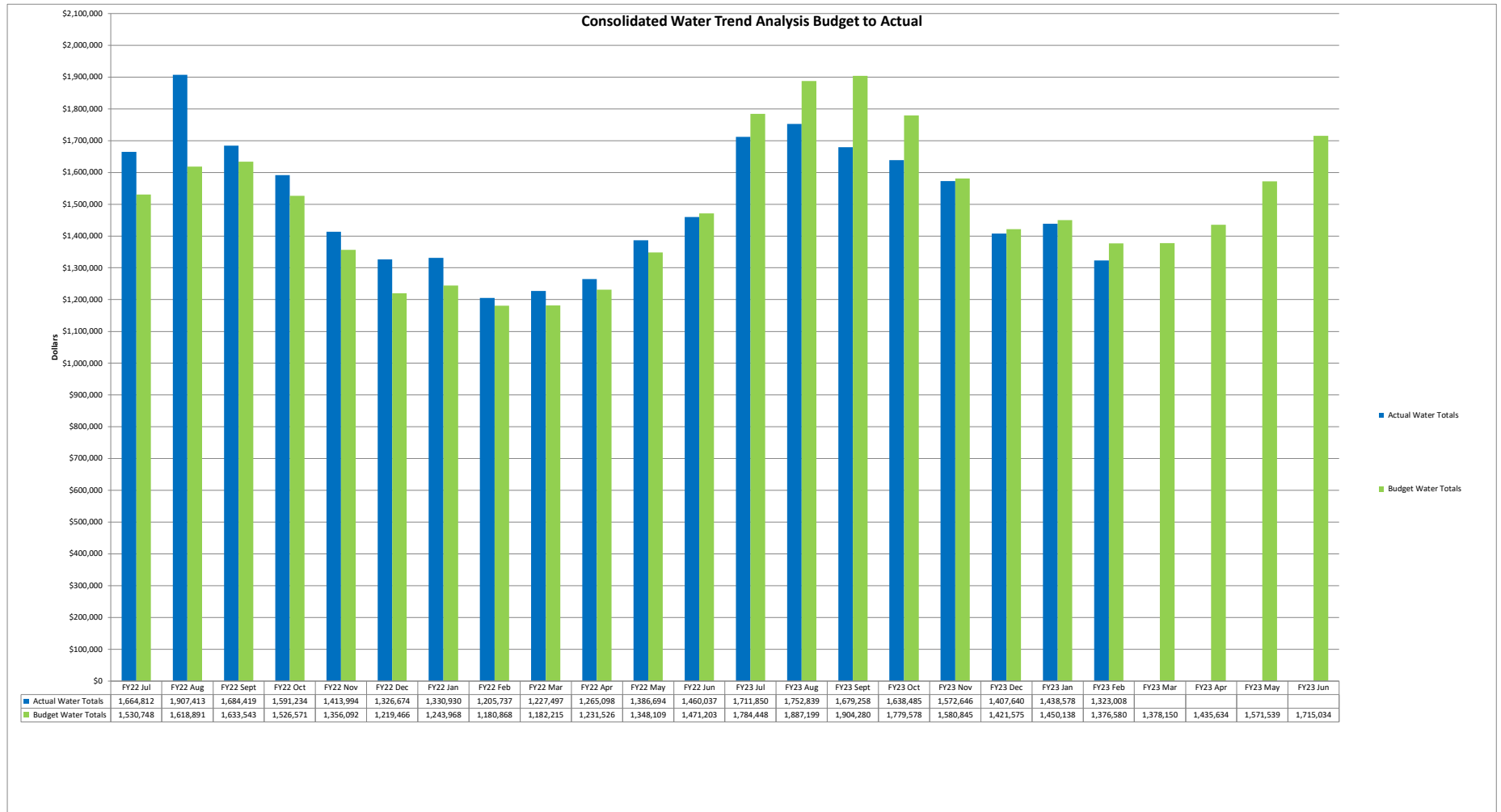


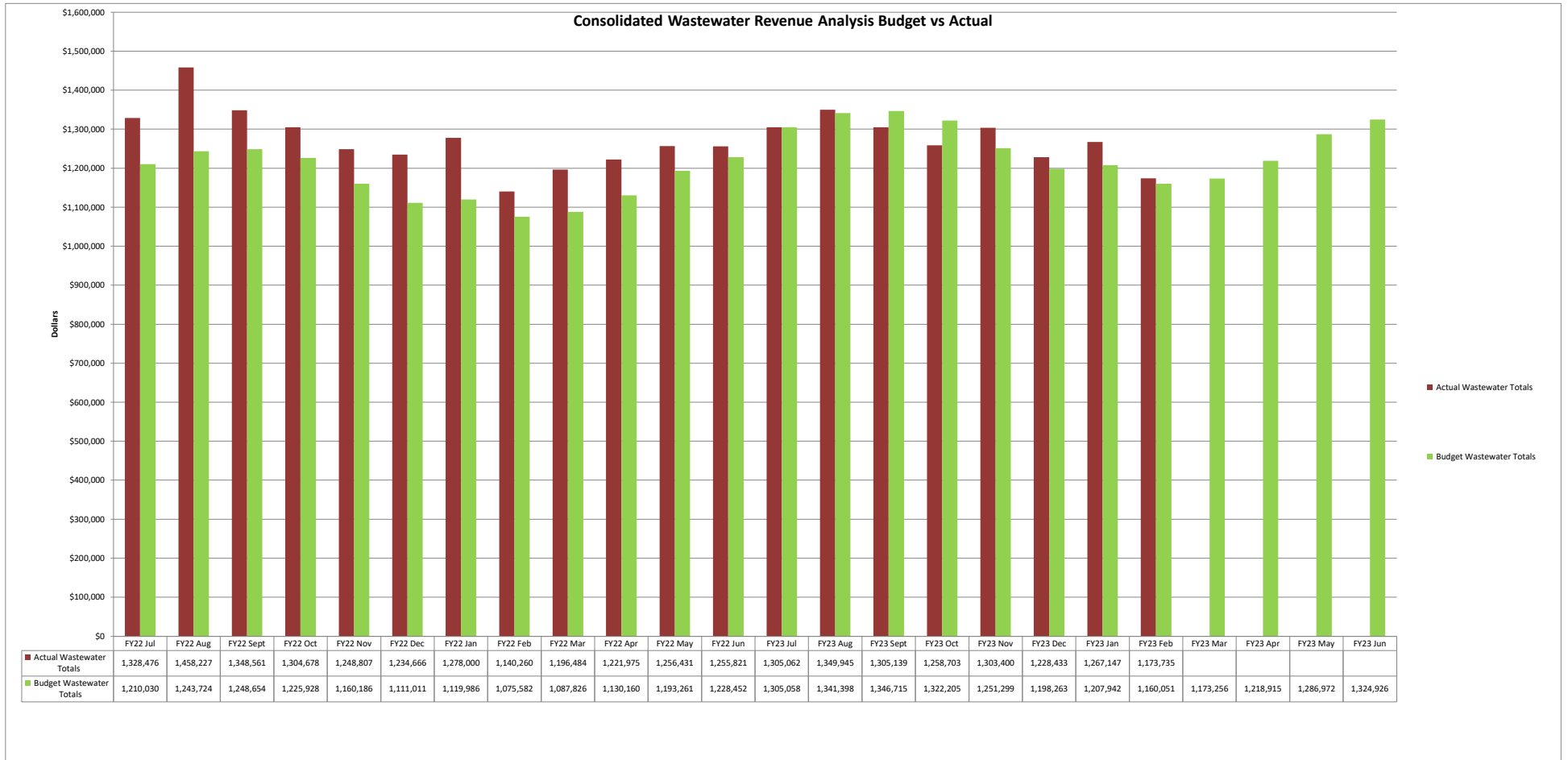
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
% Irrigation to total	7.24%	7.54%	7.02%	6.70%	3.75%	0.90%	0.27%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Irrigation	11,175,137	11,900,819	10,767,652	10,097,825	5,513,080	1,200,380	370,153					
Institutional - Domestic Consumption	11,319,291	12,674,993	12,747,929	12,683,947	12,771,652	11,778,793	12,305,045					
Industrial	939,061	1,164,077	948,893	933,427	833,612	906,243	709,399					
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					
Offices - Domestic Consumption	3,674,283	4,083,421	3,700,076	3,470,304	3,043,916	3,329,037	4,809,082					
MFR - Domestic Consumption	34,974,805	35,804,051	36,296,110	36,410,800	37,401,009	36,056,416	36,927,115					
SFR - Domestic Consumption	69,126,793	67,577,187	67,479,481	66,746,613	67,286,795	63,599,125	65,965,821					

Monthly Water Consumption Fiscal Year 2022

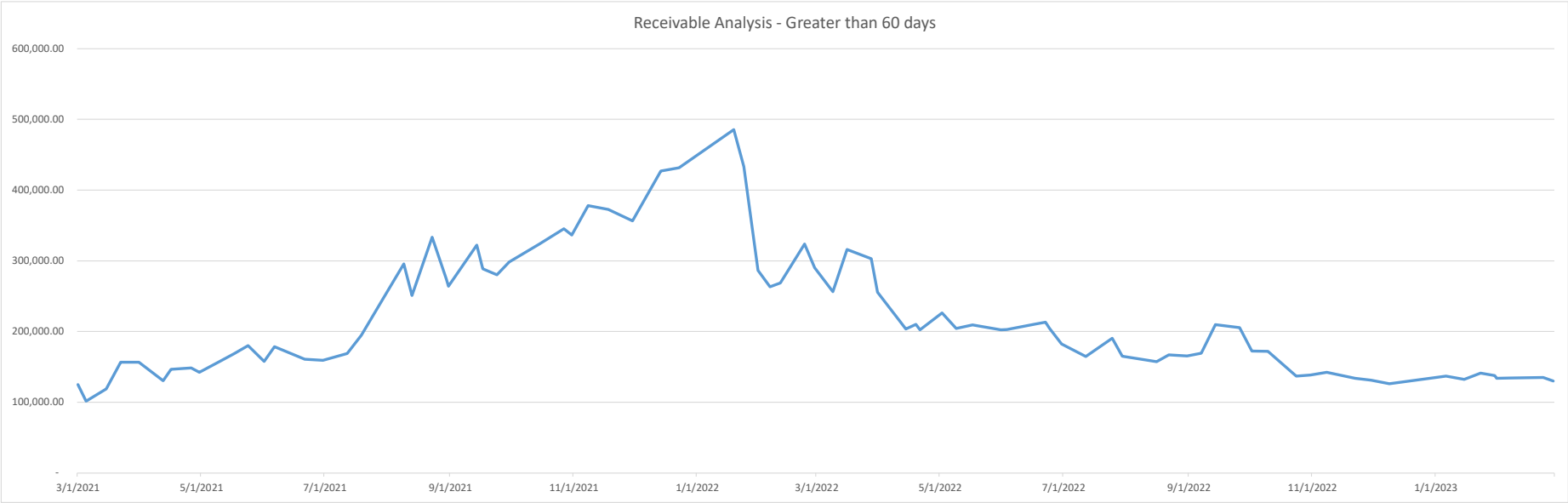


	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
% Irrigation to total	8.73%	9.74%	8.19%	7.63%	4.82%	1.01%	0.34%	0.28%	0.38%	0.79%	2.57%	5.03%
Total Irrigation	14,081,507	17,746,655	13,631,436	12,050,529	7,093,317	1,406,778	470,655	357,324	497,487	1,058,531	3,669,728	7,491,053
Institutional - Domestic Consumption	11,582,738	13,489,815	13,865,774	13,494,096	12,724,964	11,630,981	11,883,862	10,962,679	11,319,135	11,212,974	11,454,262	11,915,469
Industrial	1,262,587	1,519,053	1,193,165	1,128,786	1,121,916	1,050,113	810,668	718,305	787,267	845,945	751,304	951,318
Comm. (Other) - Domestic Consumption	21,372,075	26,208,337	24,479,570	20,510,511	19,291,182	17,778,992	17,574,070	15,092,224	16,832,508	18,691,391	20,575,249	21,115,992
Offices - Domestic Consumption	3,879,956	4,069,097	3,591,164	3,441,196	3,335,735	3,025,301	2,634,609	2,778,047	3,334,693	3,305,569	3,261,990	3,439,334
MFR - Domestic Consumption	35,402,612	38,868,005	38,709,217	39,341,545	37,682,580	38,067,253	40,137,903	34,042,165	36,211,107	36,066,312	35,359,564	34,760,663
SFR - Domestic Consumption	73,692,893	80,350,479	71,047,224	67,925,415	65,790,587	65,994,951	66,908,674	61,974,946	60,946,308	62,355,766	67,822,510	69,331,219









**Albemarle County Service Authority**  
**February 2023 Payments**

Check #	CHECK DATE	VENDOR NAME	AMOUNT	DESCRIPTION OVER \$5,000
Wire	02/07/2023	Rivanna Water & Sewer Authority	1,990,411.18	Monthly Water & Wastewater Srv
ACH	02/15/2023	Payroll	162,397.31	Net Pay
ACH	02/28/2023	Payroll	162,125.75	Net Pay
231584269	02/15/2023	IRS - Federal Tax Deposit	62,822.17	Tax Deposit
Wire	02/24/2023	The Bank of New York Mellon	49,081.78	Debt Service
65628	02/15/2023	Whitman, Requardt & Assoc LLP	21,405.01	ACSA-SCADA Implementation
65582	02/15/2023	M C Dean Incorporated	20,991.19	SCADA Phase 3 SPO
65560	02/15/2023	Dewberry Engineers Incorporated	19,095.00	Avon Property PH1 Dev & PH2
65565	02/15/2023	Ferguson US Holdings Inc	15,300.18	Meter order 1.5 inch & Various
65547	02/15/2023	Bank of America	14,807.15	Software, Memberships, Tools
65567	02/15/2023	AGILIS LLC	11,229.63	CIP: 4 Story Residential Backflow
231584270	02/15/2023	Virginia Dept of Taxation	10,448.32	Tax Deposit
65557	02/15/2023	Daly Computers Incorporated	9,237.00	Large Network Printer Replace
65590	02/15/2023	Ramboll Americas Engineering	7,614.50	Biscuit Run Sewer Replacement
65562	02/15/2023	Dominion Energy Virginia	6,942.30	Monthly Energy Service
65588	02/15/2023	Masters Auto Body Incorporated	6,555.80	Repairs to Unit #53
65630	02/15/2023	Zoho Corporation	6,414.00	OpManager Software
65623	02/15/2023	Verizon Wireless Services LLC	5,988.14	Monthly Cellular Service
65578	02/15/2023	Kaseya US LLC	5,985.16	Unitrends Onsite Appliance
231584267	02/15/2023	VALIC	5,265.00	Benefit
65602	02/15/2023	RSG Landscaping LLC	5,142.19	Landscaping
65554	02/15/2023	Virginia Department of Emergency Mgm	4,440.00	
65563	02/15/2023	EWT Holdings III Corporation	4,027.30	
65585	02/15/2023	Mansfield Oil Company	3,908.91	
231584264	02/15/2023	Nationwide	3,842.15	
65586	02/15/2023	Mansfield Oil Company of Gainesville Inc	3,756.68	
65626	02/15/2023	Michael Sean McGill	3,500.00	
65580	02/15/2023	Synchrony Bank	3,276.14	
65568	02/15/2023	Fortiline Incorporated	3,240.00	
65596	02/15/2023	PFM Asset Management LLC	2,997.57	
231584263	02/15/2023	ICMA Membership Renewals	2,931.25	
65555	02/15/2023	Consolidated Pipe & Supply	2,450.00	
65622	02/15/2023	Cellco Partnership	2,201.93	
65571	02/15/2023	Terry Hagen	1,744.70	
231584271	02/15/2023	Flexible Benefit	1,736.00	
65617	02/15/2023	UniFirst Corporation	1,695.30	
65556	02/15/2023	Cues Incorporated	1,673.23	
65612	02/15/2023	Thomas Topel	1,656.34	
231584272	02/15/2023	ACSA Flexible Spending	1,601.15	
65601	02/15/2023	Rivanna Water & Sewer Authority	1,532.58	
65584	02/15/2023	Mailing Services of Virginia	1,497.00	
65624	02/15/2023	VA Utility Protection Service Inc	1,383.90	
65615	02/15/2023	Tyler Technologies Incorporated	1,304.00	
65558	02/15/2023	Harris Systems USA Incorporated	1,260.00	

65569	02/15/2023	Frank & Associates Incorporated	1,200.00
65618	02/15/2023	United Rentals (North	856.50
65579	02/15/2023	LB Technology Incorporated	687.50
65551	02/15/2023	Culpeper Auto Parts Incorporated	673.16
65629	02/15/2023	Matthew Wood	627.32
65603	02/15/2023	S L Williamson Company Inc	605.75
65581	02/15/2023	Luck Stone Corporation	603.00
65600	02/15/2023	Rivanna Solid Waste Authority	595.00
65591	02/15/2023	ODP Business Solutions LLC	556.21
65631	02/15/2023	Cincinnati Insurance Company	493.16
65573	02/15/2023	Hathaway Solutions LLC	480.75
65608	02/15/2023	TSRC Incorporated	461.21
65621	02/15/2023	HD Supply Facilities Maint LTD	446.37
65633	02/15/2023	Treasurer of Virginia	430.90
65541	02/15/2023	Advance Stores Company Inc	416.16
65595	02/15/2023	Petrotest Incorporated	410.00
65598	02/15/2023	Rexel USA Inc DBA Mayer Electric Supply	344.23
65607	02/15/2023	The Estate of Sarah Healy	329.37
65548	02/15/2023	Brink's Incorporated	309.93
65540	02/01/2023	Pioneer Sandwiches VII LLC	300.00
65544	02/15/2023	Aqua Air Laboratories Inc	300.00
65593	02/15/2023	David Clevenson	300.00
65616	02/15/2023	U. S. Bank	291.67
65552	02/15/2023	City of Charlottesville	277.50
65599	02/15/2023	Ricoh USA Incorporated	275.00
65597	02/15/2023	Republic Services	224.89
65625	02/15/2023	Protocol SSD Corporation	221.09
65604	02/15/2023	Safeware Incorporated	218.44
65542	02/15/2023	Carsons LLC	177.00
65570	02/15/2023	Garden Spot	167.63
65614	02/15/2023	Commonwealth of Virginia DPOR	160.00
65575	02/15/2023	James River Communications Inc	159.00
65619	02/15/2023	University Tire & Auto	154.95
65634	02/15/2023	Virginia Department	150.00
	02/22/2023	Virginia Dept of Transportation	150.00
65574	02/15/2023	Kelli Huffman	147.80
65632	02/15/2023	Taxing Authority Consulting Services PC	140.49
65564	02/15/2023	FedEx	132.56
65577	02/15/2023	James H Jones	132.27
65543	02/15/2023	American Pest Incorporated	118.00
65589	02/15/2023	Richard Nelson	100.46
65592	02/15/2023	Brenda Tyree-Terrell	100.00
65594	02/15/2023	Yvonne Carey	100.00
65609	02/15/2023	The Supply Room	97.44
65549	02/15/2023	Cynthia Brown	90.55
65613	02/15/2023	Traffic Safety Supplies LLC	83.92
65561	02/15/2023	Document Destruction of	69.95

65583	02/15/2023	Montie L Madison	67.72
65559	02/15/2023	Department of Motor Vehicles	65.00
65576	02/15/2023	Price Chevrolet Company	60.00
65572	02/15/2023	Harry A Wright's Incorporated	48.00
65539	02/01/2023	KBS Incorporated	43.25
65566	02/15/2023	Fisher Auto Parts Incorporated	36.41
65627	02/15/2023	Teresa Westall	34.45
65550	02/15/2023	Central Virginia Electric Cooperative	33.71
65545	02/15/2023	Augusta Cooperative Farm Bureau	32.48
65546	02/15/2023	Avemore Apartments LP	31.50
65610	02/15/2023	Lorraine Thomas	23.36
65606	02/15/2023	Specialty Fasteners of	14.64
65587	02/15/2023	Martin Hardware Company Inc	11.43
65553	02/15/2023	Stacy Coleman	10.97
65605	02/15/2023	Carlos Sanchez	6.81
65611	02/15/2023	Thryv Incorporated	6.50
65620	02/15/2023	Zekhrali Urushanov	5.07



# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<b>AGENDA TITLE:</b> FY 2023 Capital Improvement Program (CIP)  <b>STAFF CONTACT(S)/PREPARER:</b> Jeremy M. Lynn, P.E., Director of Engineering	<b>AGENDA DATE:</b> March 16, 2023  <b>CONSENT AGENDA:</b>  <b>ACTION:</b> ■ <b>INFORMATION:</b> ■  <b>ATTACHMENTS:</b> YES
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**BACKGROUND:** Monthly CIP Memo including a status report on active CIP Projects, changes to the CIP Schedule, the revised CIP Schedule, and a list of Active Private Development Projects.

**DISCUSSION:**

- Questions about the status of active CIP Projects.
- Schedule changes to six projects.

**BUDGET IMPACT:** None.

**RECOMMENDATIONS:** None.

**BOARD ACTION REQUESTED:** Approval of the Consent Agenda.

**ATTACHMENTS:**

- Monthly CIP Report
- List of CIP schedule changes
- Revised CIP Schedule
- List of Active Private Development Projects



**Albemarle County Service Authority (ACSA)**  
**Capital Improvement Project Report**  
**March 2023**

**1. Risk Assessment Improvements Phase 1 (Account Code 1621):**

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	55%
Contractor:	Harrisonburg Construction Co., Inc. (HCC)
Construction Start:	November 2022
Completion:	May 2023
Total Budget:	\$1,221,950
Appropriated Funds:	\$1,222,048

**Project Description** - After the attacks of September 11, 2001 industry leaders were tasked by the federal government to prioritize requirements for the protection of the nation's critical infrastructure. The Water Sector, encompassing both water and wastewater, was one of the categories /identified that were expected to remain resilient and continue operating regardless of emergency events. As part of the on-going preparedness program for the ACSA to remain resilient a Vulnerability Assessment was completed in conjunction with our community partners. All our critical assets were analyzed for risks caused by both natural and human-made hazards, using the AWWA Standard J100: *Risk and Resilience Management of Water and Wastewater Systems*. The result was a report to establish mitigation measures to lower risks and increase resiliency. Some mitigation measures have already been completed with others phased over upcoming fiscal years based upon priority.

**3/7/2023: Fencing work at the Woodbrook and Georgetown Green Sewer Pump Stations is complete. Fence installation is underway at Ashcroft Pump Station No. 2.**



*Ashcroft Pump Station No. 2*





*Woodbrook Sewer Pump Station*



*Georgetown Green Sewer Pump Station*

## **2. Energy Audit (Account Code 1625):**

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Study
Percent Complete:	95%
Contractor:	Unknown
Construction Start:	N/A
Completion:	October 2022 (Study)
Total Budget:	\$390,000
Appropriated Funds:	\$296,000

**Project Description** - This project will consist of a comprehensive energy audit of the Operations Center and all pump stations. It will evaluate current energy consumption and the factors that drive it, as well as an analysis of utility rate structures to identify potential cost savings. Surveys will be conducted of all systems, including operation and maintenance procedures to determine where energy conservation can be improved.

1/10/2023: The Final Report has been received and is under review by ACSA staff.

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

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

Contractor:	Undetermined
Construction Start:	2023
Completion:	2024
Total Budget:	\$4,315,000
Appropriated Funds:	\$634,312

**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 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. 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.

**3/7/2023: Comments on the 90% Architectural Plans and Site Plan have been provided to Dewberry, with submission to the County anticipated later this month. Dominion Energy is finalizing the pole relocation costs and coordination with joint utility users.**

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

Consultant:	ACSA/Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	30%
Contractor:	Foothill Irrigation
Construction Start:	February 2023
Completion:	June 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 devices. 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) assemblies on the domestic water service line to high rise structures, defined as four (4) or more stories.

**3/7/2023: Foothill Irrigation has completed all backflow assembly installations associated with Phase 1. ACSA staff is in the process of**

reestablishing communications with customers in Phases 2 and 3 to begin scheduling installations.

**5. 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:	\$5,004,900
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 systems. 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.

**3/7/2023:** Rice Associates is currently performing test holes excavations to gather additional information associated with existing utilities. This information will be used to assist in the design of the replacement water mains.

**6. 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:	TBD based on VDOT Bridge Replacement
Completion:	TBD
Total Budget:	\$951,400
Appropriated Funds:	\$124,975

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

2/7/2023: VDOT continues to review alternative designs and hopes to have more information to share with the ACSA later this spring.

#### **7. Crozet Phase 4 Water Main Replacement (Account Code 1756):**

Consultant:	Michael Baker International, Inc. (Baker)
Project Status:	Design
Percent Complete:	100%
Contractor:	Undetermined
Construction Start:	2023
Completion:	2025
Total Budget:	\$6,183,500
Appropriated Funds:	\$588,156

Project Description - Our Strategic Plan calls for the eventual replacement of all asbestos-cement and PVC (pre-1990) water mains in our system, as they are older and made of a weaker material than the current industry norm. 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.

**3/7/2023: ACSA staff recently learned that a Water Protection Ordinance (WPO) permit will be required for this project and the County will require all easements to be obtained before this permit can be issued. Therefore, obtaining the last easement is now the critical path item and must be obtained before the project can be advertised. A final offer will be extended for the last remaining easement the week of March 6, 2023. The final easement may require condemnation by the ACSA Board.**

#### **8. Jefferson Village Water Main Replacement (Account Code 1747):**

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	90%
Contractor:	Commonwealth Excavating, Inc. (CEI)
Construction Start:	August 2022
Completion:	April 2023
Total Budget:	\$2,451,000
Appropriated Funds:	\$1,614,340



**Project Description** - This project addresses the goal in our Strategic Plan for the eventual replacement of all asbestos-cement water mains in our system. The existing water mains are approximately 49 years old and have reached the end of their useful life. As a former well system that was connected to public water, many of the mains are also undersized.

**3/7/2023: CEI and S.L. Williamson remobilized to the neighborhood on March 6, 2023 to begin restoration efforts, which includes replacement of all sanitary sewer manhole frame and covers in the roadway and final pavement restoration.**



*Replace MH Frame and Cover*



*Repaving along Adams Court*

## **9. 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:	\$8,130,000
Appropriated Funds:	\$598,497

**Project Description** - This project addresses the goal in our Strategic Plan for the eventual replacement of all asbestos-cement water mains in our system. The existing water mains are approximately 54 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.

**3/7/2023: F&R completed the geotechnical borings the week of February 13, 2023.**

#### **10. 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:	\$2,430,000
Appropriated Funds:	\$255,338

**Project Description** - Our Strategic Plan calls for the eventual replacement of PVC (pre-1990) water mains in our system, as they are older and made of weaker material than the current industry norm. This project will replace the PVC water mains that have been in service since the early 1980's.

1/10/2023: ACSA staff is reviewing the proposed geotechnical boring plan prepared by Ramboll.

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

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	50%
Contractor:	Undetermined
Construction Start:	2024
Completion:	2025
Total Budget:	\$3,385,000
Appropriated Funds:	\$209,335

**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.

1/10/2023: ACSA staff is reviewing the proposed test hole plan prepared by Dewberry.

## **12. Broadway Street Water Main Replacement (Account Code 1768):**

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Design
Percent Complete:	90%
Contractor:	Undetermined
Construction Start:	2023
Completion:	2024
Total Budget:	\$792,800
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.

1/10/2023: Design efforts are nearing completion and no easements are anticipated for this project. A Board Authorization is proposed for this project.

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

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	0%
Contractor:	Undetermined
Construction Start:	2027
Completion:	2027
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.

**3/7/2023:** The design kick-off meeting with Dewberry was held on March 2, 2023. Field survey efforts are scheduled to begin the week of March 27, 2023. ACSA staff will provide notification to all residents in advance of field survey activities commencing.

#### **14. 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:	\$5,947,300
Appropriated Funds:	\$290,887

**Project Description** - Our Strategic Plan calls for the eventual replacement of PVC (pre-1990) water mains in our system, as they are older and made of weaker material than the current industry norm. This project will replace the PVC water mains that have been in service since the 1980's and will eliminate pipe saddles at the water service connections that have been failing due to corrosion.

**3/7/2023: Baker has submitted 50% Design Documents and they are under review by ACSA staff.**

#### **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:	\$5,908,800
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 is in need of upgrading 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.

**3/7/2023: ACSA staff recently met with a development team to discuss current sewer capacities and the necessary upgrades to**



accommodate their multi-family residential development within this drainage area. Based on flow projections and existing pipe capacities, upgrades to a large portion of this gravity sanitary sewer system may be necessary ahead of the ACSA's schedule for construction. This may ultimately shift some of the responsibility of upgrading the existing sewer to the development team. ACSA staff has shared the current design with their team, and they are in the process of obtaining cost estimates from contractors. To date, 8 of 24 easements have been obtained.

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

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	0%
Contractor:	Linco, Inc. (Linco)
Construction Start:	2023
Completion:	2023
Total Budget:	\$479,600
Appropriated Funds:	\$84,916

**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.

**3/7/2023: ACSA Maintenance has performed easement clearing to improve access for Linco. A Board Authorization is proposed for this project.**

#### **17. FY 2021 Miscellaneous Sewer Rehabilitation (Account Code 1904):**

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	95%
Contractor:	Prism Contractors & Engineers, Inc. (Prism)
Construction Start:	October 2020
Completion:	December 2022
Total Budget:	\$200,000
Appropriated Funds:	\$200,000

**Project Description** - This project continues our annual "find and fix" program of sanitary sewer rehabilitation to reduce I&I in our system. The ACSA made the decision to split our miscellaneous rehabilitation Contract

Documents into separate contracts: one for repair and replacement work, and the other for trenchless pipe rehabilitation plus internal manhole rehabilitation. This contract will be utilized to perform trenchless rehabilitation, including sewer lining, segmental lining, top hats, internal point repairs and manhole rehabilitation that doesn't require excavation work, to correct problems in our system found with systematic CCTV inspection by ACSA crews. It will also be used to complete rehabilitation recommendations generated from the SSES's of larger drainage basins.

11/7/2022: Prism has completed the relining and manhole rehabilitation work associated with Work Order No. 6.

#### **18. FY 2022 Miscellaneous Sewer Rehabilitation (Account Code 1906):**

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Construction
Percent Complete:	Underway
Contractor:	Prism Contractors & Engineers, Inc. (Prism)
Construction Start:	October 2021
Completion:	January 2023
Total Budget:	\$200,000
Appropriated Funds:	\$200,000

**Project Description** - This project continues our annual "find and fix" program of sanitary sewer rehabilitation to reduce I&I in our system. The ACSA made the decision to split our miscellaneous rehabilitation Contract Documents into separate contracts: one for repair and replacement work, and the other for trenchless pipe rehabilitation plus internal manhole rehabilitation. This contract will be utilized to perform trenchless rehabilitation, including sewer lining, segmental lining, top hats, internal point repairs and manhole rehabilitation that doesn't require excavation work, to correct problems in our system found with systematic CCTV inspection by ACSA crews. It will also be used to complete rehabilitation recommendations generated from the SSES's of larger drainage basins.

**3/7/2023: Prism has completed rehabilitation of nine sanitary sewer manholes associated with Work Order No. 3. They are scheduled to perform pipe cleaning and CCTV inspections of approx. 2,000 linear feet of gravity sewer mains the week of March 6, 2023.**

#### **19. 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:	\$3,493,715
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. In an effort 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, a majority of the property owners are interested in connecting to public sewer if it was made available.

**3/7/2023: ACSA staff met on February 9, 2023 to discuss Baker's design and the significant portions of the neighborhood proposed to be served by E/One systems. ACSA will be working with Baker to explore how additional portions of the neighborhood could be served by gravity.**

**20. 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:	\$1,550,000
Appropriated Funds:	\$2,003,831

**Project Description** - This wastewater pump station was constructed 33 years ago by private development and the original equipment is wearing down. In addition 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. A study to evaluate the best option for upgrading this pump station will be performed, followed by design and construction.

11/7/2022: The Notice to Proceed was issued on October 17, 2022. ACI is working on submittals, but long lead times for some critical items are anticipated.

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

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction

Percent Complete:	5%
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 been experiencing higher than normal amounts of solid debris that have been causing 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.

**3/7/2023: ECUC has mobilized to the Georgetown Green Sewer Pump Station and installed the control panel and associated conduit.**



*Wet Well with Existing Vault Top*



*Wet Well with Top Removed*

## **22. Lewis Hill – West Leigh Water Connection (Account Code 1754):**

Consultant:	ACSA Engineering Department
Project Status:	Design
Percent Complete:	95%
Contractor:	ACSA Maintenance Department

Construction Start:	2023
Completion:	2023
Total Budget:	\$80,900
Appropriated Funds:	\$7,125

Project Description - The existing PVC water main that serves as the primary connection between West Leigh Subdivision and Lewis Hill Subdivision is at risk for failure 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" diameter pipe.

**3/7/2023: ACSA staff have provided a response to the Lewis Hill HOA advising that utilization of the existing easement is the alternative to obtaining a new easement. Use of the existing easement will be more impactful, but that decision will be left up to the HOA.**

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

Consultant:	ACSA Engineering Department
Project Status:	Design
Percent Complete:	100%
Contractor:	Undetermined
Construction Start:	2023
Completion:	2023
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. It is anticipated all the work will be coordinated in-house by Maintenance Department personnel.

12/5/2022: The 100% Design Documents have been completed by ACSA staff.

**24. Exclusion Meters Replacement (Account Code 1759):**

Consultant:	ACSA Engineering Department
Project Status:	Construction
Percent Complete:	32%
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 that all future irrigation meters would be tapped separately off our water mains, to be owned and controlled by the ACSA. 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.

**3/7/2023: ACSA Maintenance continues to work on exclusion meters in the vicinity of Darby Road (west), focusing their efforts on stubbing future lines out of the pavement. There are currently 338 exclusion meters remaining in our system.**

## **25. Woodbrook Force Main Replacement Project (Account Code 1826):**

Consultant:	ACSA Engineering Department
Project Status:	Construction
Percent Complete:	0%
Contractor:	Linco, Inc. (Linco)
Construction Start:	March 2023
Completion:	April 2023
Total Budget:	\$149,468
Appropriated Funds:	\$228,745

Project Description – Pure Technologies recently completed a condition assessment of all ACSA's sanitary sewer force mains. Based on that work, they recommended replacement of a portion of the Woodbrook Force Main due to thinning pipe walls from corrosion.

**3/7/2023: Linco mobilized to the site on March 6, 2023 to begin replacement of a portion of the sanitary sewer force main. VDOT has advised that repaving along Idlewood Drive is anticipated in May 2023, so this is driving our schedule for replacement. A Board Authorization is proposed for this project.**





*Contractor Mobilization*



*Contractor Preparations*

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

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction
Percent Complete:	0%
Contractor:	M.C. Dean
Construction Start:	November 2022
Completion:	June 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. This project will create a Supervisory Control and Data Acquisition (SCADA) System that will allow ACSA employees to remotely monitor the operations of these critical assets from the main office building. It will also allow personnel to change the operational settings of some pump stations from the main office building. Using alarms, we will be able to more quickly evaluate problems and

prevent some failures before they happen. The project will be completed in three phases over a three year period.

**3/7/2023: M.C. Dean has advised that orders for all significant lead time items have been placed.**





**Albemarle County Service Authority (ACSA)****CIP Schedule Revisions**  
**March 2023**

1. The construction phase of the Risk Assessment Improvements has been extended to May 2023.
2. The Avon Street Maintenance Yard was renamed Avon Operations Center.
3. The Pantops Drainage Basin Rehabilitation Project has been removed from the CIP Schedule.
4. The Hollymead Drainage Basin Rehabilitation Project has been removed from the CIP Schedule.
5. The Oak Forest Pump Station Abandonment Project has been removed from the CIP Schedule.
6. The Briarwood Pump Station Generator Project has been removed from the CIP Schedule.

Moving forward, ACSA staff is proposing the elimination of the CIP Spreadsheet as the pertinent information related to project status and scheduling is included in the CIP Monthly Report. We welcome any feedback from ACSA Board members on this proposal.



[illegible]

	In house construction		Engineering		Construction
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**Albemarle County Service Authority (ACSA)**  
**Active Private Development Projects**  
**March 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 Offsite Sewer (Rio): Offsite sewer extension to serve Belvedere 5B (20 single family homes at the end of Fowler Street). It will also provide sewer service to future phases of Belvedere and a portion of Dunlora Village.
- 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. Galaxie Farm Subdivision (Scottsville): Water and sewer main extensions to serve 65 residential units. This project is located along Scottsville Road, south of Mountain View Elementary.
- f. Glenbrook at Foothills Phase 3 (White Hall): Water and sewer main extensions to serve 120 residential units between the Parkside Village and Glenbrook at Foothills subdivisions along Park Ridge Drive.
- g. Hollymead Town Center Area C Townhomes – Block II (Rio): Water and sewer main extensions to serve 56 attached single family units. This project is located to the south of Timberwood Boulevard, in between Connor Drive and Berkmar Drive.
- h. 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.
- i. Mountain View Elementary Building Addition (Scottsville): Water main extension to facilitate building addition.

- j. Pleasant Green – Phase 2A (White Hall): Water and sewer main extensions to serve 24 residential units. This project is located to the southeast of the Orchard Acres subdivision.
- 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. Proffit Road Townhomes South (Rivanna): Water and sewer main extensions to serve 31 town home units. This project is located along Proffit Road, south of Martha Jefferson Outpatient Care Center.
- m. 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.
- n. Rivanna Station – Nicholson Building Addition (Rivanna): Water main extension to serve an expansion of the Nicholson Building and a parking garage at NGIC, located east Route 29 and south of Boulders Road.
- o. 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.
- p. 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.
- 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.

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<p><b>AGENDA TITLE:</b> FY 2023 CIP Authorizations</p> <p><b>STAFF CONTACT(S)/PREPARER:</b> Jeremy M. Lynn, P.E., Director of Engineering</p>	<p><b>AGENDA DATE:</b> March 16, 2023</p> <p><b>ACTION:</b> <input type="checkbox"/> <b>INFORMATION:</b> <input type="checkbox"/></p> <p><b>CONSENT AGENDA:</b></p> <p><b>ACTION:</b> <input checked="" type="checkbox"/> <b>INFORMATION:</b> <input type="checkbox"/></p> <p><b>ATTACHMENTS:</b> YES</p>
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**BACKGROUND:** Authorization for three CIP Projects, all of which are included in the CIP Rate Model Budget. The first authorization is the award and funding of construction for the FY 2024 Miscellaneous Sanitary Sewer Rehabilitation Project. The second authorization is funding for construction of the Biscuit Run Sewer Replacement and Stream Restoration Project. The third authorization is funding for construction of the Woodbrook Force Main Replacement Project.

### DISCUSSION:

- ❖ Continues the efforts of our “Find & Fix Program” to reduce I&I throughout our sanitary sewer system.
- ❖ Initiates construction of the Biscuit Run Sewer Replacement and Stream Restoration Project.
- ❖ Initiates construction of the Woodbrook Force Main Replacement Project and allows construction to occur prior to VDOT’s Spring 2023 paving schedule.

**BUDGET IMPACT:** The amount requested for the FY 2024 Miscellaneous Sanitary Sewer Rehabilitation Project matches the cost budgeted in the CIP Rate Model. The construction cost for the Biscuit Run Sewer Replacement and Stream Restoration Project is approximately \$260,000 more than originally anticipated, but we are hopeful that the full contingency of \$151,000 is unnecessary. While the construction cost for the Woodbrook Force Main Replacement Project was not incorporated into the CIP Rate Model, ACSA staff anticipates considerable savings related to pavement restoration since this work will be performed ahead of VDOT’s repaving schedule.

**RECOMMENDATIONS:** Authorize award of the FY 2024 Miscellaneous Sanitary Sewer Rehabilitation Project to Prism Contractors and Engineers, Inc., and funding for these three projects to keep our CIP Project Schedule moving forward and improving our utility system.

**BOARD ACTION REQUESTED:** Approve the Consent Agenda.



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

- ❖ Detailed memo of the proposed CIP authorization.
- ❖ Recommendation letter from Ramboll, dated March 7, 2023, for award of the FY 2024 Miscellaneous Sanitary Sewer Rehabilitation Project.
- ❖ Biscuit Run Sewer Replacement and Stream Restoration Cost Estimate dated July 11, 2022, by Ramboll.
- ❖ 2022 Miscellaneous Sanitary Sewer Replacement Work Order No. 2 Cost Estimate associated with the Woodbrook Force Main Replacement Project.



# MEMORANDUM

**To:** Board of Directors  
**From:** Jeremy M. Lynn, P.E., Director of Engineering  
**Date:** March 16, 2023  
**Re:** FY 2023 CIP Authorizations  
**cc:** Michael E. Derdeyn

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The following projects require Board authorization:

- A. FY 2024 Miscellaneous Sanitary Sewer Rehabilitation Project:** On March 1, 2023, the ACSA accepted bids for the FY 2024 Miscellaneous Sanitary Sewer Rehabilitation Project. Two (2) contractors submitted bids on the project and the apparent low bidder was Prism Contractors and Engineers, Inc. with a bid of \$777,253.45. The Engineer's Estimate was \$837,688.70. Attached is a letter, dated March 7, 2023, along with the bid tabulation from Ramboll recommending award of the contract to Prism Contractors and Engineers, Inc. for their bid of \$777,253.45. ACSA staff concurs with Ramboll's recommendation. This contract amount is not what is anticipated to be spent on an annual basis, but instead includes all potential bid items identified for this type of contract. ACSA staff will target expenditures of approximately \$500,000 annually for sewer rehabilitation.

## **Board Action**

We request the Board of Directors authorize the award of the FY 2024 Miscellaneous Sanitary Sewer Rehabilitation Project and appropriate \$500,000 from the FY 2023 3R Fund for construction.

- B. Biscuit Run Sewer Replacement and Stream Restoration Project:** The ACSA has completed design and obtained the necessary permits for construction of the Biscuit Run Sewer Replacement and Stream Restoration Project. A Work Order has been issued to Linco, Inc. under the FY 2022 Miscellaneous Sewer Repair/Replacement Contract to complete this project. Most of the line items for the work anticipated are included in the contract, but a change order for additional items outside of the contract is expected. Attached is the Construction

Cost Estimate provided by Ramboll totaling \$671,503, which includes a 30% contingency.

**Board Action**

We request the Board of Directors authorize \$671,503 from the FY 2023 3R Fund for the construction of the Biscuit Run Sewer Replacement and Stream Restoration Project.

- C. Woodbrook Force Main Replacement Project:** When Pure Technologies performed a condition assessment of all ACSA's sanitary sewer force mains, they recommended replacement of a 300 feet portion of the Woodbrook Force Main due to thinning pipe walls from corrosion. A Work Order has been issued to Linco, Inc. under the FY 2022 Miscellaneous Sewer Repair/Replacement Contract to complete this replacement. The anticipated cost of the replacement is approximately \$99,000. Linco is performing this work ahead of the planned VDOT paving in the area, which will reduce ACSA's repaving obligation.

**Board Action**

We request the Board of Directors authorize \$99,000 from the FY 2023 3R Fund for the construction of the Woodbrook Force Main Replacement Project.

JML/jml

Attachments

010101CIPAuthorizations03162023

Dear Richard:

March 7, 2023

Ramboll has performed a review of bids received for the On-Call Sanitary Sewer Rehabilitation Contract (Project No: 2023-03). A total of two (2) bids were received, ranging in price from \$777,253.45 to \$953,400.45. The Engineer's estimate for this project was \$837,688.70. The documents required to be included in the Contractors' Bids consisted of the Bid Form (Section 00400), Bid Bond (Section 00430), receipt of Addenda (Section 00490) and Completed Qualification Statement (Section 00431). All bidders submitted these documents. Bid results are summarized on the attached bid tabulation sheet.

Of the two bids received, the apparent low bidder is Prism Contractors & Engineers, Inc. (Prism). We have reviewed their Bid Form and found it to be accurate with no mathematical errors noted. Prism has submitted the required bid bond. We have contacted Prism and verified that they are comfortable with their bid.

Therefore, Ramboll recommends that the Authority award the contract to Prism Contractors & Engineers, Inc., based on the bid amount of \$777,253.45, for the construction of the On-Call Sanitary Sewer Rehabilitation Contract Project.

Yours sincerely



**Maggie L. Hopkins, PE**  
PROJECT OFFICER  
016-WTR NETWORK RESOURCES

D 804-822-4223  
maggie.hopkins@ramboll.com

Attachments: Bid Tabulation

Ramboll  
4435 Waterfront Drive  
Suite 205  
Glen Allen, VA 23060  
USA

T 804-822-4200  
F 804-270-5808  
<https://ramboll.com>

Ref **Bid Results – 2023-03**  
**Sanitary Sewer**  
**Rehabilitation Contract**

Confidential



BID TABULATION

Albemarle County Service Authority

2023-03 Sanitary Sewer Rehabilitation Contract

March 7, 2023

Contract Items				Bid Tab Information					
Item	Description	Qty.	Units	Engineers Estimate		Prism Contractors & Engineers, Inc.		Tri-State Utilities	
				Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost
PART 1 - SANITARY SEWER									
1	CLEAN AND TELEWISE SANITARY SEWERS (ONLY FOR SEWERS NOT BEING REHABILITATED)								
A.	EXISTING 4" or 6" DIAMETER SERVICE LATERALS (USING PUSH CAMERA)	4	EA	\$ 350.00	\$ 1,400.00	\$ 200.00	\$ 800.00	\$ 495.00	\$ 1,980.00
B.	EXISTING 6" DIAMETER MAIN SEWERS	600	LF	\$ 4.00	\$ 2,400.00	\$ 3.00	\$ 1,800.00	\$ 5.00	\$ 3,000.00
C.	EXISTING 8" DIAMETER MAIN SEWERS	12,000	LF	\$ 4.00	\$ 48,000.00	\$ 3.00	\$ 36,000.00	\$ 4.00	\$ 48,000.00
D.	EXISTING 10" DIAMETER MAIN SEWERS	1,500	LF	\$ 4.00	\$ 6,000.00	\$ 3.00	\$ 4,500.00	\$ 4.00	\$ 6,000.00
E.	EXISTING 12" DIAMETER MAIN SEWERS	500	LF	\$ 5.00	\$ 2,500.00	\$ 3.00	\$ 1,500.00	\$ 4.00	\$ 2,000.00
F.	EXISTING 15"/16" DIAMETER MAIN SEWERS	500	LF	\$ 5.00	\$ 2,500.00	\$ 3.00	\$ 1,500.00	\$ 4.00	\$ 2,000.00
G.	EXISTING 18" DIAMETER MAIN SEWERS	500	LF	\$ 6.00	\$ 3,000.00	\$ 5.00	\$ 2,500.00	\$ 5.00	\$ 2,500.00
H.	EXISTING 21" DIAMETER MAIN SEWERS	500	LF	\$ 6.00	\$ 3,000.00	\$ 6.00	\$ 3,000.00	\$ 6.00	\$ 3,000.00
I.	EXISTING 24" DIAMETER MAIN SEWERS	500	LF	\$ 8.00	\$ 4,000.00	\$ 8.00	\$ 4,000.00	\$ 6.00	\$ 3,000.00
J.	EXISTING 30" DIAMETER MAIN SEWERS	500	LF	\$ 12.00	\$ 6,000.00	\$ 10.00	\$ 5,000.00	\$ 6.00	\$ 3,000.00
K.	SERVICE LATERAL DYE TESTING								
1)	1 OR 2 SERVICES TO BE DYE TESTED PER SEWER SEGMENT; COST PER DYE TEST	5	EA	\$ 350.00	\$ 1,750.00	\$ 90.00	\$ 450.00	\$ 495.00	\$ 2,475.00
2)	3 OR MORE SERVICES TO BE DYE TESTED PER SEWER SEGMENT; COST PER DYE TEST	5	EA	\$ 350.00	\$ 1,750.00	\$ 90.00	\$ 450.00	\$ 495.00	\$ 2,475.00
2	MANHOLE REHABILITATION: COAT MANHOLE								
A.	HYDROGEN-SULFIDE RESISTANT MATERIAL, AS SPECIFIED IN EXISTING 4-FOOT-DIAMETER MANHOLES	100	VF	\$ 280.00	\$ 28,000.00	\$ 290.00	\$ 29,000.00	\$ 504.00	\$ 50,400.00
A.	HYDROGEN-SULFIDE RESISTANT MATERIAL, AS SPECIFIED IN EXISTING 4-FOOT-DIAMETER MANHOLES	25	VF	\$ 325.00	\$ 8,125.00	\$ 350.00	\$ 8,750.00	\$ 606.00	\$ 15,150.00
C.	EPOXY, AS SPECIFIED IN EXISTING 4-FOOT-DIAMETER MANHOLES	100	VF	\$ 500.00	\$ 50,000.00	\$ 375.00	\$ 37,500.00	\$ 271.20	\$ 27,120.00
D.	EPOXY, AS SPECIFIED, IN EXISTING 5-FOOT-DIAMETER MANHOLES	25	VF	\$ 550.00	\$ 13,750.00	\$ 450.00	\$ 11,250.00	\$ 345.60	\$ 8,640.00
3	REBUILD EXISTING MANHOLE BENCHING AND INVERT CHANNELS								
A.	IN EXIST 4-FOOT-DIAMETER MANHOLES	10	EA	\$ 700.00	\$ 7,000.00	\$ 650.00	\$ 6,500.00	\$ 516.00	\$ 5,160.00
B.	IN EXIST 5-FOOT-DIAMETER MANHOLES	1	EA	\$ 850.00	\$ 850.00	\$ 800.00	\$ 800.00	\$ 696.00	\$ 696.00
4	INSTALL NEW INFLOW DISHES	15	EA	\$ 300.00	\$ 4,500.00	\$ 250.00	\$ 3,750.00	\$ 690.00	\$ 10,350.00
5	REPAIR INDIVIDUAL PRECAST MANHOLE JOINT LEAKS	25	EA	\$ 300.00	\$ 7,500.00	\$ 350.00	\$ 8,750.00	\$ 810.00	\$ 20,250.00
6	CUTTING PROTRUDING SERVICE CONNECTIONS	5	EA	\$ 610.00	\$ 3,050.00	\$ 350.00	\$ 1,750.00	\$ 240.00	\$ 1,200.00
7	CURED-IN-PLACE PIPE LINING (CIPP) (INCLUDES PRE-CCTV, CLEANING, AND POST-CCTV)								
A.	6" DIAMETER SEWER, NON-EASEMENT AREA								
1)	4.5 mm (HOT WATER/STEAM CURE, FELT LINER)	500	LF	\$ 38.00	\$ 19,000.00	\$ 40.00	\$ 20,000.00	\$ 40.00	\$ 20,000.00
B.	8" DIAMETER SEWER, NON-EASEMENT AREA								
1)	6.0 mm (HOT WATER/STEAM CURE, FELT LINER)	2,000	LF	\$ 40.00	\$ 80,000.00	\$ 40.00	\$ 80,000.00	\$ 42.00	\$ 84,000.00
2)	GREATER THAN 6.0 mm THICKNESS, PAYMENT FOR EACH 0.5 mm OVER 6.0 mm, ADD TO ITEM 1 ABOVE	500	LF	\$ 2.50	\$ 1,250.00	\$ 2.00	\$ 1,000.00	\$ 1.25	\$ 625.00
C.	10" DIAMETER SEWER, NON-EASEMENT AREA								
1)	6.0 mm (HOT WATER/STEAM CURE, FELT LINER)	1,000	LF	\$ 45.00	\$ 45,000.00	\$ 45.00	\$ 45,000.00	\$ 49.00	\$ 49,000.00
2)	GREATER THAN 6.0 mm THICKNESS, PAYMENT FOR EACH 0.5 mm OVER 6.0 mm, ADD TO ITEM 1 ABOVE	500	LF	\$ 2.50	\$ 1,250.00	\$ 2.50	\$ 1,250.00	\$ 1.45	\$ 725.00
D.	12" DIAMETER SEWER, NON-EASEMENT AREA								
1)	7.5 mm (HOT WATER/STEAM CURE, FELT LINER)	500	LF	\$ 55.00	\$ 27,500.00	\$ 55.00	\$ 27,500.00	\$ 69.00	\$ 34,500.00

E.	2)	GREATER THAN 7.5 mm THICKNESS, PAYMENT FOR EACH 0.5 mm OVER 7.5 mm, ADD TO ITEM 1 ABOVE	250	LF	\$	3.50	\$	875.00	\$	3.00	\$	750.00	\$	1.55	\$	387.50
		<b>15" DIAMETER SEWER, NON-EASEMENT AREA</b>														
	1)	7.5 mm (HOT WATER/STEAM CURE, FELT LINER)	100	LF	\$	68.00	\$	6,800.00	\$	66.00	\$	6,600.00	\$	100.00	\$	10,000.00
F.	2)	GREATER THAN 7.5 mm THICKNESS, PAYMENT FOR EACH 0.5 mm OVER 7.5 mm, ADD TO ITEM 1 ABOVE	100	LF	\$	3.50	\$	350.00	\$	3.00	\$	300.00	\$	1.75	\$	175.00
		<b>18" DIAMETER SEWER, NON-EASEMENT AREA</b>														
	1)	9.0 mm (HOT WATER/STEAM CURE, FELT LINER)	100	LF	\$	81.00	\$	8,100.00	\$	90.00	\$	9,000.00	\$	130.00	\$	13,000.00
G.	2)	GREATER THAN 7.5 mm THICKNESS, PAYMENT FOR EACH mm OVER 7.5 mm, ADD TO ITEM 1 ABOVE	100	LF	\$	4.00	\$	400.00	\$	5.00	\$	500.00	\$	2.05	\$	205.00
		<b>21" DIAMETER SEWER, NON-EASEMENT AREA</b>														
	1)	12.0 mm (HOT WATER/STEAM CURE, FELT LINER)	100	LF	\$	105.00	\$	10,500.00	\$	100.00	\$	10,000.00	\$	146.00	\$	14,600.00
H.	2)	GREATER THAN 12.0 mm THICKNESS, PAYMENT FOR EACH 0.5 mm OVER 12.0 mm, ADD TO ITEM 1 ABOVE	100	LF	\$	4.00	\$	400.00	\$	4.00	\$	400.00	\$	2.18	\$	218.00
		<b>24" DIAMETER SEWER, NON-EASEMENT AREA</b>														
	1)	12.0 mm (HOT WATER/STEAM CURE, FELT LINER)	100	LF	\$	120.00	\$	12,000.00	\$	135.00	\$	13,500.00	\$	171.00	\$	17,100.00
I.	2)	GREATER THAN 12.0 mm THICKNESS, PAYMENT FOR EACH 0.5 mm OVER 12.0 mm, ADD TO ITEM 1 ABOVE	100	LF	\$	4.50	\$	450.00	\$	4.00	\$	400.00	\$	2.25	\$	225.00
		<b>30" DIAMETER SEWER, NON-EASEMENT AREA</b>														
	1)	15.0 mm (HOT WATER/STEAM CURE, FELT LINER)	100	LF	\$	155.00	\$	15,500.00	\$	190.00	\$	19,000.00	\$	203.00	\$	20,300.00
J.	2)	GREATER THAN 15.0 mm THICKNESS, PAYMENT FOR EACH 0.5 mm OVER 15.0 mm, ADD TO ITEM 1 ABOVE	100	LF	\$	4.50	\$	450.00	\$	4.00	\$	400.00	\$	3.45	\$	345.00
		<b>ADD-ON PRICE FOR CIPP INSTALLATION IN EASEMENT AREAS, ANY DIAMETER CIPP, COST PER SET-UP</b>	10	EA	\$	2,500.00	\$	25,000.00	\$	1,500.00	\$	15,000.00	\$	3,500.00	\$	35,000.00
K.		<b>CIPP PRODUCT TESTS, AS SPECIFIED</b>	10	EA	\$	300.00	\$	3,000.00	\$	300.00	\$	3,000.00	\$	350.00	\$	3,500.00
8		<b>SEGMENTAL CURED-IN-PLACE PIPE LINING (CIPP) (INCLUDES PRE-CCTV, CLEANING, AND POST-CCTV)</b>														
A.		<b>6" DIAMETER SEWER, 4.5 MM SEGMENTAL LINER, NON-EASEMENT AREA</b>														
	1)	0 TO 4 FEET LONG	1	EA	\$	4,500.00	\$	4,500.00	\$	3,500.00	\$	3,500.00	\$	3,500.00	\$	3,500.00
B.	2)	GREATER THAN 4 FEET IN LENGTH, PAYMENT FOR EACH FOOT OVER 4 FEET, ADD TO ITEM 1 ABOVE	10	EA	\$	350.00	\$	3,500.00	\$	350.00	\$	3,500.00	\$	180.00	\$	1,800.00
		<b>8" DIAMETER SEWER, 6.0 MM SEGMENTAL LINER, NON-EASEMENT AREA</b>														
	1)	0 TO 4 FEET LONG	5	EA	\$	4,500.00	\$	22,500.00	\$	4,000.00	\$	20,000.00	\$	3,500.00	\$	17,500.00
C.	2)	GREATER THAN 4 FEET IN LENGTH, PAYMENT FOR EACH FOOT OVER 4 FEET, ADD TO ITEM 1 ABOVE	10	EA	\$	350.00	\$	3,500.00	\$	350.00	\$	3,500.00	\$	240.00	\$	2,400.00
		<b>10" DIAMETER SEWER, 6.0 MM SEGMENTAL LINER, NON-EASEMENT AREA</b>														
	1)	0 TO 4 FEET LONG	1	EA	\$	5,000.00	\$	5,000.00	\$	4,000.00	\$	4,000.00	\$	3,540.00	\$	3,540.00
D.	2)	GREATER THAN 4 FEET IN LENGTH, PAYMENT FOR EACH FOOT OVER 4 FEET, ADD TO ITEM 1 ABOVE	10	EA	\$	400.00	\$	4,000.00	\$	400.00	\$	4,000.00	\$	270.00	\$	2,700.00
		<b>12" DIAMETER SEWER, 7.5 MM SEGMENTAL LINER, NON-EASEMENT AREA</b>														
	1)	0 TO 4 FEET LONG	1	EA	\$	5,500.00	\$	5,500.00	\$	4,500.00	\$	4,500.00	\$	4,200.00	\$	4,200.00
E.	2)	GREATER THAN 4 FEET IN LENGTH, PAYMENT FOR EACH FOOT OVER 4 FEET, ADD TO ITEM 1 ABOVE	10	EA	\$	425.00	\$	4,250.00	\$	400.00	\$	4,000.00	\$	300.00	\$	3,000.00
		<b>15" DIAMETER SEWER, 7.5 MM SEGMENTAL LINER, NON-EASEMENT AREA</b>														
	1)	0 TO 4 FEET LONG	1	EA	\$	6,000.00	\$	6,000.00	\$	5,000.00	\$	5,000.00	\$	5,400.00	\$	5,400.00
	2)	GREATER THAN 4 FEET IN LENGTH, PAYMENT FOR EACH FOOT OVER 4 FEET, ADD TO ITEM 1 ABOVE	10	EA	\$	475.00	\$	4,750.00	\$	450.00	\$	4,500.00	\$	420.00	\$	4,200.00
9		<b>LATEARAL CURED-IN-PLACE PIPE LINING (CIPP) (INCLUDES PRE-CCTV, CLEANING, AND POST-CCTV)</b>														
A.		<b>4" DIAMETER SEWER, 3.0 MM LINER, NON-EASEMENT AREA</b>														
	1)	0 TO 3 FEET LONG	25	EA	\$	3,500.00	\$	87,500.00	\$	3,750.00	\$	93,750.00	\$	4,200.00	\$	105,000.00
B.	2)	GREATER THAN 3 FEET IN LENGTH, PAYMENT FOR EACH FOOT OVER 3 FEET, ADD TO ITEM 1 ABOVE	25	LF	\$	65.00	\$	1,625.00	\$	55.00	\$	1,375.00	\$	150.00	\$	3,750.00
		<b>6" DIAMETER SEWER, 4.0 MM LINER, NON-EASEMENT AREA</b>														
	1)	0 TO 3 FEET LONG	25	EA	\$	3,500.00	\$	87,500.00	\$	3,750.00	\$	93,750.00	\$	4,200.00	\$	105,000.00
	2)	GREATER THAN 3 FEET IN LENGTH, PAYMENT FOR EACH FOOT OVER 3 FEET, ADD TO ITEM 1 ABOVE	25	LF	\$	65.00	\$	1,625.00	\$	55.00	\$	1,375.00	\$	150.00	\$	3,750.00
10		<b>RECONNECT EXISTING ACTIVE SERVICE CONNECTIONS TO NEW LINED SEWERS</b>	50	EA	\$	150.00	\$	7,500.00	\$	160.00	\$	8,000.00	\$	450.00	\$	22,500.00
11		<b>REPAIR PIPE CONNECTION</b>	50	EA	\$	300.00	\$	15,000.00	\$	250.00	\$	12,500.00	\$	300.00	\$	15,000.00
12		<b>SEAL FRAME TO CONE</b>														
A.		<b>MORTAR, AS SPECIFIED, IN EXISTING MANHOLES</b>	25	EA	\$	500.00	\$	12,500.00	\$	300.00	\$	7,500.00	\$	402.00	\$	10,050.00
B.		<b>MECHANICAL SEAL, AS SPECIFIED, IN EXISTING MANHOLES</b>	25	EA	\$	500.00	\$	12,500.00	\$	475.00	\$	11,875.00	\$	804.00	\$	20,100.00
C.		<b>FLEX-SEAL, AS SPECIFIED, IN EXISTING MANHOLES</b>	25	EA	\$	500.00	\$	12,500.00	\$	450.00	\$	11,250.00	\$	516.00	\$	12,900.00

13	CLEAN EXISTING MANHOLE	10	EA	\$	350.00	\$	3,500.00	\$	350.00	\$	3,500.00	\$	309.60	\$	3,096.00		
14	REPAIR HOLE/CRACK	10	EA	\$	300.00	\$	3,000.00	\$	250.00	\$	2,500.00	\$	216.00	\$	2,160.00		
15	SMOKE TESTING	5,000	LF	\$	2.00	\$	10,000.00	\$	0.50	\$	2,500.00	\$	1.10	\$	5,500.00		
PART 2 - COMMON BID ITEMS																	
16	PERFORM WORK ON A TIME AND MATERIAL BASIS																
A.	LABOR RATES PER HOUR																
1)	SUPERINTENDENT/FOREMAN	16	HR	\$	130.00	\$	2,080.00	\$	90.00	\$	1,440.00	\$	132.00	\$	2,112.00		
2)	LABORER	16	HR	\$	90.00	\$	1,440.00	\$	75.00	\$	1,200.00	\$	92.00	\$	1,472.00		
17	TRAFFIC CONTROL																
A.	ARROW BOARD	2	DAYS	\$	160.00	\$	320.00	\$	125.00	\$	250.00	\$	100.00	\$	200.00		
B.	MESSAGE BOARD	2	DAYS	\$	280.00	\$	560.00	\$	200.00	\$	400.00	\$	550.00	\$	1,100.00		
C.	WATER FILLED BARRIER	1	DAYS	\$	560.00	\$	560.00	\$	100.00	\$	100.00	\$	100.00	\$	100.00		
D.	CRASH TRUCK	2	DAYS	\$	625.00	\$	1,250.00	\$	750.00	\$	1,500.00	\$	950.00	\$	1,900.00		
18	FOR THE USE OF TRAILER-MOUNTED, GENERATOR-DRIVEN LIGHT STANDS	2	DAYS	\$	340.00	\$	680.00	\$	350.00	\$	700.00	\$	950.00	\$	1,900.00		
19	BYPASS PUMPING																
A.	6-INCH PUMP	10	EA	\$	1,650.00	\$	16,500.00	\$	1,500.00	\$	15,000.00	\$	2,500.00	\$	25,000.00		
B.	HARD PIPING WITH WATERTIGHT CONNECTIONS																
1)	6" HARD PIPING	100	LF	\$	35.00	\$	3,500.00	\$	30.00	\$	3,000.00	\$	75.00	\$	7,500.00		
2)	8" HARD PIPING	50	LF	\$	105.00	\$	5,250.00	\$	30.00	\$	1,500.00	\$	100.00	\$	5,000.00		
Subtotal Construction Cost - Contract Items 1 - 19:				\$	813,290.00			\$		754,615.00			\$		925,631.50		
20	FOR MOBILIZATION TO THE PROJECT SITE, AS SPECIFIED (MAXIMUM OF 3% OF SUB-TOTAL)	TBD	%		3.0%	\$	24,398.70		3.0%	\$	22,638.45		3.0%	\$	27,768.95		
Total - Contract Items 1 - 20:								\$	837,688.70			\$		777,253.45	\$		953,400.45
								no discrepancy found in Bid Form				no discrepancy found in Bid Form					
								Attachments included:				Attachments included:					
Section 00400 (Bid Form)								X				X					
Section 00430 (Bid Bond)								X (5%)				X (5%)					
Section 00490 (Receipt of Addenda)								X				excluded but no Addenda issued					
Section 00431 (Completed Qualification Statement)								X				X					







**Sewer Replacement and Stream Restoration Construction Cost Estimate - 100% Design Submittal**  
**Albemarle County Service Authority**  
**Biscuit Run Sewer Replacement and Stream Restoration Project (2020-10)**  
**July 11, 2022**

Item	Description	Total Cost
<b>Summary - Sewer Replacement</b>		
	Subtotal Construction Cost and Contingent Contract Items	\$ 108,409
	Mobilization	\$ 3,132
	Contingency	\$ 32,523
<b>TOTAL ESTIMATED SEWER REPLACEMENT CONSTRUCTION COST (WITH CONTINGENCY):</b>		<b>\$ 144,063</b>
<b>Summary - Stream Restoration</b>		
	Subtotal Construction Cost	\$ 396,571
	Mobilization	\$ 11,897
	Contingency	\$ 118,971
<b>TOTAL ESTIMATED STREAM RESTORATION CONSTRUCTION COST (WITH CONTINGENCY):</b>		<b>\$ 527,439</b>
<b>Summary - Total Project Rough Order of Magnitude (ROM) Cost Estimate</b>		
	Subtotal Construction Cost and Contingent Contract Items	\$ 504,980
	Mobilization	\$ 15,029
	Contingency	\$ 151,494
<b>TOTAL ESTIMATED SEWER REPLACEMENT CONSTRUCTION COST (WITH CONTINGENCY):</b>		<b>\$ 671,503</b>



**2022 Miscellaneous Sanitary Sewer Replacement Project**  
**Work Order No. 2**

Contract Items					
Item	Description	Qty.	Units	Unit Cost	Total Cost
3	OPEN-CUT SEWER INSTALLATION				
A.	NEW 8" SEWER (PVC)				
1)	0 TO 6 FEET DEEP	300	LF	\$ 106.05	\$ 31,815.00
F.	FOR SUBSTITUTING DUCTILE IRON PIPE				
1)	8" SEWER	300	LF	\$ 79.18	\$ 23,755.20
11	PLUG EXISTING ABANDONED SEWER				
A.	EXIST 4-INCH TO 8-INCH-DIAMETER SEWERS	2	EA	\$ 777.70	\$ 1,555.40
18	SURFACE RESTORATION				
A.	ASPHALT PAVEMENT RESTORATION				
1)	6" OF ASPHALT (2" WEAR COURSE + 4" BINDER)	300	SY	\$ 120.19	\$ 36,057.00
21	BYPASS PUMPING				
A.	6-INCH PUMP	1	EA	\$ 2,403.80	\$ 2,403.80
					\$ 95,586.40
23	FOR MOBILIZATION TO THE PROJECT SITE, AS SPECIFIED (MAXIMUM OF 3% OF SUB-TOTAL)	3	%		\$ 2,867.59
					\$ 98,453.99



# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

### CONSENT AGENDA

**AGENDA TITLE:** Water Tank  
Inspection & Cleaning

**STAFF CONTACT(S)/PREPARER:**  
Alex Morrison & Billy Defibaugh

**AGENDA DATE:** March 16, 2023

**ACTION:** None

**ATTACHMENTS:** Yes

**BACKGROUND:** The American Water Works Association (AWWA) recommends thorough water tank inspections every 5 years and tank cleaning every 3 years. The ACSA has 8 water tanks; 4 steel (Ashcroft Lower, Ednam, Northfields and Scottsville) and 4 glass lined (Ashcroft Upper, Avon Park, Glenmore and Mosby Mountain). They range in size from the 5,000-gallon hydropneumatic Northfields Tank to the 586,000-gallon Glenmore Tank (Attachment 1).

**DISCUSSION:** Water tank inspections are carried out by an independent engineering firm. Purposes of the inspection are to evaluate the interior and exterior coating's performance and life expectancy, assess the condition of metal surfaces and water tank appurtenances (attachments), review safety and health aspects, and make budgetary recommendations for continued maintenance of the tank. A detailed report, a Field Inspection Report (FIR), photographs and descriptions are generated from the inspection along with recommendations for any repairs or improvements.

Each year we also complete Remotely Operated Vehicle (ROV) inspections on 1- or 2 tanks. A ROV is a mobile underwater vehicle equipped with HD video (Attachment 2). This inspection allows us to keep the tank in service as a tank draining will keep a tank offline for 3-5 days. The ROV is fully disinfected before insertion, so a visual inspection of the inside of the tank can occur without draining it or taking it out of service.

Tank cleaning often uses a fire hydrant or hose bib for a power washer water source. A portable tank is sometimes needed to keep an area in service while a tank is offline for cleaning and inspection (Attachment 3). Sediment is flushed from the wet interior (Attachment 4). Also, the inside of the tank is swept and scrubbed. Any and all screened openings are washed and inspected to make sure they are in good condition to prevent any debris from entering the newly cleaned tank. Following the inspection, chlorine is added to disinfect the tank per AWWA Standards. Finally, the water is tested for the presence of coliform bacteria and odors remaining from the chlorine treatment. Tank inspections and cleaning are paramount in keeping ACSA water clean and safe.

**BOARD ACTION REQUESTED:** None

**ATTACHMENTS:**

Attachment 1



Attachment 2



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

Attachment 3



Attachment 4








# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<p><b>AGENDA TITLE:</b> Rivanna Water &amp; Sewer Authority (RWSA) Monthly Update</p> <p><b>STAFF CONTACT(S)/PREPARER:</b> Gary O'Connell, Executive Director </p>	<p><b>AGENDA DATE:</b> March 16, 2023</p> <p><b>CONSENT AGENDA:</b> Informational</p> <p><b>ATTACHMENTS:</b> No</p>
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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 February 28<sup>th</sup> RWSA Board Meeting and other communications.

RWSA Board Meeting and other Updates and Approvals at the February 28<sup>th</sup> Board Meeting:

- **Easements Major Projects:** Continuing work with Uva and the Uva Foundation to finalize easements for the Reservoirs Pipeline Project, and the Ragged Mountain Reservoir to Observatory Water Treatment Plant Pipe and Pump Station Replacement.
- **Central Water Line:** This a critical project for ACSA customers to connect the expanded Observatory Water Treatment Plant to the Urban System. The project is at the 30% engineering design phase. A recent workshop with City and ACSA staff was held to review construction details on the project.
- **Capital Improvements Program Proposed:** Introduced the FY 24-28 CIP:
  - 56 projects for a five-year total of \$326.1 million, water - \$209.6 million and wastewater - \$58.2 million;
  - Proposes accelerating the SFRR to RMR Pipeline Project by three years for a 2024 start and 2030 completion;
  - Increases water capacity and reliability in the northern service area with piping to the South Fork Water Treatment Plant, and a new Airport Pump Station (\$10 million);
  - ACSA share of wholesale rate is a 13.5% increase;
  - Federal grants total \$21.5 million;
  - \$77 million increases in five-year CIP due to projected construction inflation;
  - Beaver Creek Reservoir Dam, Pump Station and Piping (\$43 million, with a \$17 million grant);
  - Additional Advanced GAC (Granular Activated Carbon) Treatment proposed at the Crozet Water Treatment Plant and at the Red Hill Water Treatment Plant;
  - Adoption of the CIP will be considered at the May 23<sup>rd</sup> RWSA Board meeting.

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

### **RWSA Major Capital Project Updates:**

- **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:	8%
Completion Date:	June 2023
Base Construction Contract:	\$37,889,941
Approved Capital Budget:	\$43,000,000

#### **Current Status:**

At South Rivanna, lead paint abatement continues. Work at Observatory includes the new Chemical Storage Building, foundation work for the GAC building expansion and a large retaining wall. Shutdown of the OBWTP is underway for December 5, 2022 – March 12, 2023.

#### **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.

At the South Rivanna Water Treatment Plant significant needs were identified and assembled into a single project. The projects include: expansion of the coagulant storage facilities; installation of additional filters to meet firm capacity needs; the addition of a second variable frequency drive at the Raw Water Pump Station; the relocation of the electrical gear from a sub-terrain location at the Sludge Pumping Station; a new Administration building onsite for additional office, lab, control room and storage space; improvements to storm sewers to accept allowable WTP discharges; and the construction of a new metal building to cover the existing liquid lime feed piping and tanks. The scope of this project will not increase plant treatment capacity, which is at 12 mgd.

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

Design Engineer:	Short Elliot Hendrickson (SEH)
Contractor:	Anderson Construction
Construction Start:	December 2021
Percent Complete:	35%
Completion Date:	March 2024
Budget:	\$10,000,000

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

### Current Status:

The concrete slab for the pump station was poured. Water line installation has begun at the pump station site and will progress south along Berkmar Drive towards Kohl's.

### 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:	Easement Acquisition & Design (50%)
Construction Start:	2025
Completion:	2028
Current Project Estimate:	\$44,000,000

### Current Status:

Preparation of engineering plans and specifications continues. RWSA staff is reviewing plans 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. RWSA staff is coordinating with VDOT on the Route 29 Bypass and Fontaine Avenue crossings. Design work on the pump station has begun, at the 50% stage.

### 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 million gallons per day (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

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

pump up to 10 million gallons per day (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 Raw Water Line-Birdwood to Old Garth Road**

Design Engineer:	Kimley-Horn
Project Start:	June 2021
Project Status:	90% Design
Construction Start:	January 2023
Completion:	January 2024
Current Project Estimate:	\$4,000,000

### Current Status:

Preparation of engineering plans and specifications is substantially complete for a 0.25-mile section of this 36" raw water pipe from Birdwood to Old Garth Road. One remaining easement is under negotiation with the UVA Foundation for this phase of the project. The railroad permit application has been finalized from the sod boring.

### History:

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

- **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:	95% NRCS Planning Process
Construction Start:	2024
Completion:	2027
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, are scheduled for completion in April. The revised Plan Environmental Assessment was

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

approved by the NRCS. NRCS funding for the final design and dam spillway upgrades will be requested at a future date.

A scope for final design work for the new raw water pump station, intake and hypolimnetic oxygenation system are being developed.

### 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. A federal grant totaling \$341,000 was secured from the National Rural Conservation Service (NRCS) to cover the costs of an Environmental Assessment for the dam modifications. 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.

### • **South Fork Rivanna River Crossing**

Design Engineer:	Michael Baker International (Baker)
Project Start:	November 2020
Project Status:	70% Design
Construction Start:	Summer 2023
Completion:	Summer 2024
Budget:	\$7,000,000

### Current Status:

Easement acquisition has begun and will include 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. Submission of the Joint Permit Application (JPA) was completed prior to Thanksgiving and RWSA was issued a VMRC permit at the end of December 2022.

### 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

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

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.

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

Design Engineer:	Michael Baker International (Baker)
Project Start:	October 2017
Project Status:	Easement Acquisition Underway
Completion Date:	2023
Total Capital Project Budget:	\$2,295,000

### Current Status:

Progress continues in the efforts to acquire the 8 miles of easements and agreements (with VDOT) for this 36" water line. Discussions continue for remaining easement with the UVA Foundation.

### History:

The approved 50-year Community Water Supply Plan includes the future construction of a raw water line from the South Fork Rivanna Reservoir to the Ragged Mountain Reservoir. This water line will replace the existing Upper Sugar Hollow Pipeline along an alternative alignment to increase raw water transfer capacity in the Urban Water System. This project includes a routing study, preliminary design, and preparation of easement documents, as well as acquisition of water line easements along the approved route.

- **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.

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

- **SRR to RMR Pipeline – Pretreatment Pilot Study**

Design Engineer:	SEH/DiNatale
Project Start:	August 2020
Project Status:	100% (Phase 2)
Completion:	December 2023
Budget:	\$22,969 (Phase 1)
	\$116,401 (Phase 2)

**Current Status:**

Final efforts are underway to better clarify operations of the raw water transfer system and associated reservoir levels during drought conditions. The next phase will include installation of nutrient monitoring/measuring equipment, and a report on the effectiveness of the equipment.

**History:**

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

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

- **Central Water Line Project**

Design Engineer:	Michael Baker International (Baker)
Project Start:	July 2021
Project Status:	30% Design
Construction Start:	2024
Completion:	2028
Budget:	\$41,000,000

**Current Status:**

Detailed field investigation and design are underway, as well as adjacent utility coordination.



# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

### 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.

- **Security Enhancements**

Construction Contractor:	Security 101
Construction Start:	March 2020
Percent Complete:	95% (WA 5), 0% (WA6)
Completion:	May 2023
Budget:	\$2,810,000

### Current Status:

WA5, which authorizes card access installation at Glenmore Water Resource Recovery Facility (GWRRF), Scottsville Water Resource Recovery Facility (SVWRRF), and Red Hill Water Treatment Plant (RHWTP), began during the week of June 20th. Conduit and cable pulling is complete at all facilities covered in the WA, and the only work that remains is wiring and programming to be completed this fall. WA6 will include card access installation at RWSA's remote sites and electronic padlocks, including all dams and pump stations. Completion scheduled for May 2023. Additional fencing, gates and card access at the main front entrance are being explored.

### History:

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

## FY 24 – 28 Charge Increases (%)

FY	24	25	26	27	28
City	9.3	9.7	9.0	9.4	10.0
ACSA	13.3*	12.4	11.7	11.6	11.4

### Charges include:

1. Albemarle County grants totaling \$750,000 in FY 23
2. VDH grant for GAC Filters (\$3.17 M, FY 22); FY 23 – 26 grant awards are pending
3. Federal NRCS grant for BCR (\$17.4 M)
4. Estimated annual increases in Operating expenses

\* new proposed operating budget has a 13.5% increase

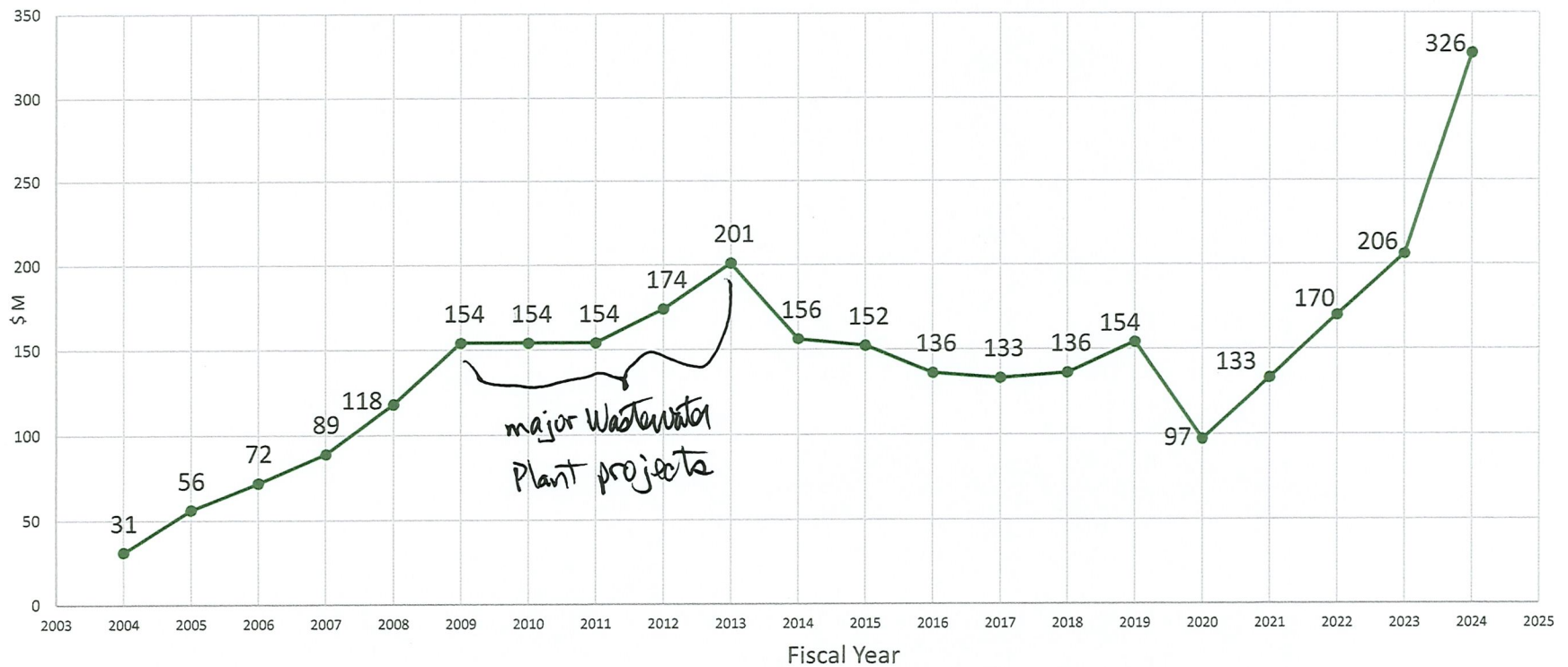
Note: Additional grants totaling \$50 M have been requested for GAC, CWL, SVWRRF Generator, MC Security Gates, Flood Protection Study

FY 24 – 28	In comparison with	FY 23 - 27
Projects: 56		Projects: 41
\$326.1 M		\$205.8 M

Changes to the 5-Yr CIP from last year : \$120.3 M increase

1. 23 existing project budgets increased due to inflation and scope progression: +\$75 M
  - a. RMR to OBWTP WL and Pumping \$18 M
  - b. Central Water Line \$17 M
  - c. Beaver Creek Dam Modifications & PS \$11 M
  - d. Crozet WWPS Repairs \$10 M
  - e. Emmet St Betterment Water Piping \$8 M
  - f. S. F. Rivanna River Crossing \$1 M
2. 3 projects were accelerated: SFRR – RMR Waterline; Crozet & Red Hill WTPs GAC +\$39.5 M
3. 17 FY 28 projects moved into the FY 24-28 CIP + \$6.9 M
4. 6 new projects were added + \$7.7 M
5. *6 existing projects were completed* *< -\$8.8 M >*

## 21-Year History of the RWSA CIP





## CIP Financial Summary

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2022)
			Current CIP Adopted 5/2022	Proposed Changes	Current Capital Budget	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
1	20.01	South Rivanna Reservoir to Ragged Mountain Reservoir Water Line Right-of-Way	\$2,740,000	\$0	\$2,740,000						\$2,740,000	\$1,710,291
2	20.03	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Line	\$16,900,000	\$16,100,000	\$700,000	\$3,200,000	\$8,000,000	\$9,000,000	\$8,000,000	\$4,100,000	\$33,000,000	\$221,153
3	20.04	Ragged Mountain Reservoir to Observatory Water Treatment Plant Raw Water Pump Station	\$8,840,000	\$2,460,000	\$375,000	\$1,800,000	\$2,500,000	\$2,700,000	\$3,000,000	\$925,000	\$11,300,000	\$121,843
4	20.48	South Rivanna Reservoir to Ragged Mountain Pipeline, Intake & Facilities	\$3,105,000	\$32,760,000	\$1,605,000	\$675,000	\$1,370,000	\$4,550,000	\$11,000,000	\$16,665,000	\$35,865,000	\$32,398
5	22.01	South Rivanna Reservoir to Ragged Mountain Reservoir - Birdwood to Old Garth	\$1,980,000	\$1,820,000	\$1,980,000	\$520,000	\$1,300,000				\$3,800,000	\$74,826
6	23.02	South Rivanna Reservoir Aeration and Ragged Mountain Reservoir HLOS Sytems	\$0	\$1,400,000	\$0					\$1,400,000	\$1,400,000	
7	20.06	Observatory Water Treatment Plant Improvements	\$23,000,000	\$0	\$23,000,000						\$23,000,000	\$9,090,262
8	23.04	Urban Water Treatment Plants - GAC Building Dehumidification	\$0	\$200,000	\$0					\$200,000	\$200,000	
9	23.05	Observatory Water Treatment Plant - Backwash Basin Sludge Removal and Inspection	\$0	\$50,000	\$0					\$50,000	\$50,000	
10	20.10	Central Water Line	\$24,000,000	\$17,000,000	\$3,300,000	\$1,000,000	\$5,800,000	\$12,500,000	\$12,400,000	\$6,000,000	\$41,000,000	\$541,686

## CIP Financial Summary (Continued)

Line No.	Proj. No.	Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2022)
			Current CIP Adopted 5/2022	Proposed Changes	Current Capital Budget	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
11	20.12	South Fork Rivanna River Crossing	\$5,850,000	\$1,050,000	\$1,100,000	\$4,400,000	\$1,400,000				\$6,900,000	\$143,901
12	20.13	Airport Rd. Pump Station and North Rivanna Transmission Main	\$10,000,000	\$0	\$6,880,000	\$3,120,000					\$10,000,000	\$1,965,920
13	20.50	Avon, Pantops and Observatory Tank Painting	\$0	\$2,200,000	\$0				\$100,000	\$2,100,000	\$2,200,000	
14	20.58	Second North Rivanna River Crossing and Select Pipe Replacement	\$0	\$30,000	\$0					\$30,000	\$30,000	
15	23.06	Emmet Street Betterment	\$2,900,000	\$7,750,000	\$1,955,000	\$540,000	\$2,845,000	\$2,235,000	\$1,075,000	\$2,000,000	\$10,650,000	\$296,086
16	24.09	Berkmar Drive Ext. Waterline - Phase 2	\$0	\$1,400,000	\$0	\$220,000	\$590,000	\$590,000			\$1,400,000	
17	24.12	Urban Storage Evaluation and Tank(s) Addition	\$0	\$870,000	\$0			\$50,000	\$300,000	\$520,000	\$870,000	
18	20.15	South Rivanna Hydropower Plant Decommissioning	\$725,000	\$285,000	\$1,010,000						\$1,010,000	\$205,591
19	20.16	South Rivanna Water Treatment Plant Improvements	\$20,000,000	\$400,000	\$20,400,000						\$20,400,000	\$17,637,761
20	24.01	South Rivanna Water Treatment Plant - PAC Upgrades	\$0	\$1,100,000	\$0	\$60,000	\$250,000	\$790,000			\$1,100,000	



## CIP Financial Summary (Continued)

Line No.		Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2022)
			Current CIP Adopted 5/2022	Proposed Changes	Current Capital Budget	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
21	20.18	North Rivanna Water Treatment Plant Decommissioning	\$2,425,000	\$250,000	\$385,000	\$100,000	\$2,190,000				\$2,675,000	\$76,110
22	20.19	Beaver Creek Dam Alteration	\$16,150,000	\$6,550,000	\$1,225,000	\$2,750,000	\$8,300,000	\$8,300,000	\$2,125,000		\$22,700,000	\$884,033
23	20.20 21.15	Beaver Creek New Raw Water Pump Station & Intake	\$15,650,000	\$4,550,000	\$1,053,000	\$3,097,000	\$7,150,000	\$7,100,000	\$1,800,000		\$20,200,000	\$302,893
24	21.01	Buck's Elbow Tank and Waterball Painting	\$0	\$1,180,000	\$0		\$80,000		\$80,000	\$1,020,000	\$1,180,000	
25	23.10	Crozet Water Treatment Plant - GAC Building Dehumidification	\$0	\$50,000	\$0					\$50,000	\$50,000	
26	23.13	Crozet AC Pipe Replacement	\$0	\$450,000	\$0					\$450,000	\$450,000	
27	23.14	Crozet Water Treatment Plant - Full GAC Treatment	\$0	\$6,550,000	\$0	\$1,450,000	\$3,000,000	\$2,100,000			\$6,550,000	
28	23.30	Crozet Finished Water Greyrock Pump Station	\$0	\$180,000	\$0					\$180,000	\$180,000	
29	22.06	Scottsville Water Treatment Plant - Upgrade	\$0	\$550,000	\$0					\$550,000	\$550,000	
30	22.07	Red Hill Water Treatment Plant - Upgrades	\$410,000	\$35,000	\$410,000	\$35,000					\$445,000	

## CIP Financial Summary (Continued)

Line No.		Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2022)
			Current CIP Adopted 5/2022	Proposed Changes	Current Capital Budget	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
31	23.16	Scottsville AC Pipe Replacement	\$0	\$80,000	\$0					\$80,000	\$80,000	
32	23.17	Full GAC Treatment - Red Hill Water Treatment Plant	\$0	\$295,000	\$0	\$66,000	\$134,000	\$95,000			\$295,000	
33	23.18	Scottsville Water Treatment Plant - GAC Building Dehumidification	\$0	\$50,000	\$0					\$50,000	\$50,000	
34	20.25	Upper Schenks Branch Interceptor	\$4,725,000	\$575,000	\$4,725,000		\$575,000				\$5,300,000	\$50,787
35	20.29	Maury Hill Branch Sewer Replacement	\$0	\$350,000	\$0					\$350,000	\$350,000	
36	20.30	Crozet Pump Station 1, 2, 3 Rehabilitation	\$590,000	\$9,760,000	\$535,000	\$570,000	\$6,500,000	\$2,745,000			\$10,350,000	\$42,267
37	20.31	Albemarle Berkley Pump Station Upgrade	\$0	\$115,000	\$0					\$115,000	\$115,000	
38	21.07	Interceptor Sewer and Manhole Repair (Phase 2)	\$965,000	\$265,000	\$430,000	\$580,000	\$220,000				\$1,230,000	
39	24.02	Interceptor Sewer and Manhole Repair (Phase 3)	\$0	\$600,000	\$0					\$600,000	\$600,000	
40	20.34	Moore's Creek AWWRF Engineering and Administration Building	\$8,500,000	\$2,000,000	\$225,000	\$975,000	\$5,900,000	\$3,400,000			\$10,500,000	



## CIP Financial Summary (Continued)

Line No.		Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2022)
			Current CIP Adopted 5/2022	Proposed Changes	Current Capital Budget	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
41	20.67	Moore's Creek AWWRF Biogas Upgrades	\$2,985,000	\$610,000	\$2,235,000	\$1,130,000	\$230,000				\$3,595,000	\$8,240
42	20.68	Moore's Creek AWWRF Building Upfits and Gravity Thickener Improvements	\$4,240,000	\$315,000	\$440,000	\$825,000	\$2,515,000	\$720,000		\$55,000	\$4,555,000	
43	21.11	Moore's Creek AWWRF Meter and Valve Replacements	\$775,000	\$0	\$775,000						\$775,000	\$38,597
44	21.18	Moore's Creek AWWRF 5kV Electrical System Upgrade	\$5,050,000	\$585,000	\$3,430,000	\$1,950,000	\$255,000				\$5,635,000	\$433,063
45	22.10	Moore's Creek AWWRF Yard Piping Upgrades		\$315,000						\$315,000	\$315,000	
46	22.12	Moore's Creek AWWRF Structural and Concrete Rehabilitation	\$8,910,000	\$2,390,000	\$3,250,000	\$3,845,000	\$3,900,000	\$305,000			\$11,300,000	\$15,450
47	24.08	Moore's Creek AWWRF MCPS Slide Gates, Valves, Bypass and Septage Receiving Upgrades		\$3,600,000		\$330,000	\$2,055,000	\$1,215,000			\$3,600,000	
48	21.12	Scottsville WRRF Whole Plant Generator and ATS	\$200,000	\$320,000	\$191,000	\$304,000	\$25,000				\$520,000	\$5,000
49	23.24	Scottsville WRRF Lagoon Outfall Rehabilitation	\$0	\$25,000	\$0					\$25,000	\$25,000	
50	23.25	Scottsville WRRF Polymer Feed Addition	\$0	\$26,000	\$0					\$26,000	\$26,000	

## CIP Financial Summary (Continued)

Line No.		Project Description	Five-Year Capital Program			Projected Future Expenses by Year					Recommended CIP	Work-in-Progress (Prev. Expenses 6/30/2022)
			Current CIP Adopted 5/2022	Proposed Changes	Current Capital Budget	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028		
51	20.42	Glenmore WRRF Polymer Feed Addition	\$0	\$30,000	\$0					\$30,000	\$30,000	
52	20.45	Asset Management	\$1,180,000	\$0	\$1,012,000	\$133,000	\$35,000				\$1,180,000	\$672,876
53	20.46	Security Enhancements	\$2,810,000	\$170,000	\$2,410,000	\$285,000	\$285,000				\$2,980,000	\$1,076,034
54	20.47	IT Infrastructure	\$600,000	\$0	\$300,000	\$300,000					\$600,000	
55	23.27	ACM Remediation	\$0	\$94,000	\$0					\$94,000	\$94,000	
56	24.06	Climate Change Flood Resilience		\$130,000		\$130,000					\$130,000	
<b>Total</b>			\$196,205,000	\$129,920,000	\$88,076,000	\$34,390,000	\$67,404,000	\$58,395,000	\$39,880,000	\$37,980,000	\$326,125,000	\$35,647,068



# ACSA Board Future Policy Issues Agendas 2023

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Regular 3rd Thursday Monthly Meetings	April '23	May '23	June '23	July '23	August '23	Sept. '23	Oct. '23	Nov. '23	Dec. '23	Pending Issues
	April 20th Recognitions	May 18th Recognitions	June 15th Recognitions	July 20th Recognitions	August 17th Recognitions	September 21st Recognitions	October 19th Recognitions	November 16th Recognitions	December 21st 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	
	Proposed Capital Improvements Program (CIP) FY '24 Presentation	Proposed FY 2024 Budget and Rates Workshop	Public Hearing on Proposed FY '24 Budget, Rates and CIP	Operational Presentation	Year-End Appropriations	Operational Presentation	Operational Presentation - Construction Inspection	Operational Presentation	Operational Presentation	Board Organizational Meeting each January
										Annual Report - January
	Public Hearing on Proposed FY '24 Capital Improvements Program (CIP)		Adoption of Proposed FY '24 Budget, Rates and CIP	Strategic Plan Update 2023-25	Operational Presentation - Training and BizLibrary	Imagine a Day Without Water		Annual Financial Report and Audit Report	Annual Investment Report	Water Audit and Energy Audit
	Proposed FY '24 Budget and Rates Overview Presentation		Amendments to Personnel Management Plan	Scottsville Water transfer to RWSA					Budget Guidelines and Schedule for FY 25 Budget/Rates	Strategic Plan Updates-2023-2025 January and July
	Resolution Scheduling Budget and Rates Public Hearing for June 15, 2023		Amendments to Rules and Regs - Rate Schedule and Policy Amendments (First-come first-served policy)						Holiday Schedule 2024	Annual Water Conservation Report - January
	National Drinking Water Week Resolution								Board Meeting Schedule 2024	National Drinking Water Week-April Imagine a Day Without Water - September
	PAFR (Popular Annual Financial Report) Presentation									AMI Updates - Customer Portal Video
										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 Director Annual Review	Executive Director Annual Review							Executive Director Mid-Year Review	
										3/16/2023





# ALBEMARLE COUNTY SERVICE AUTHORITY

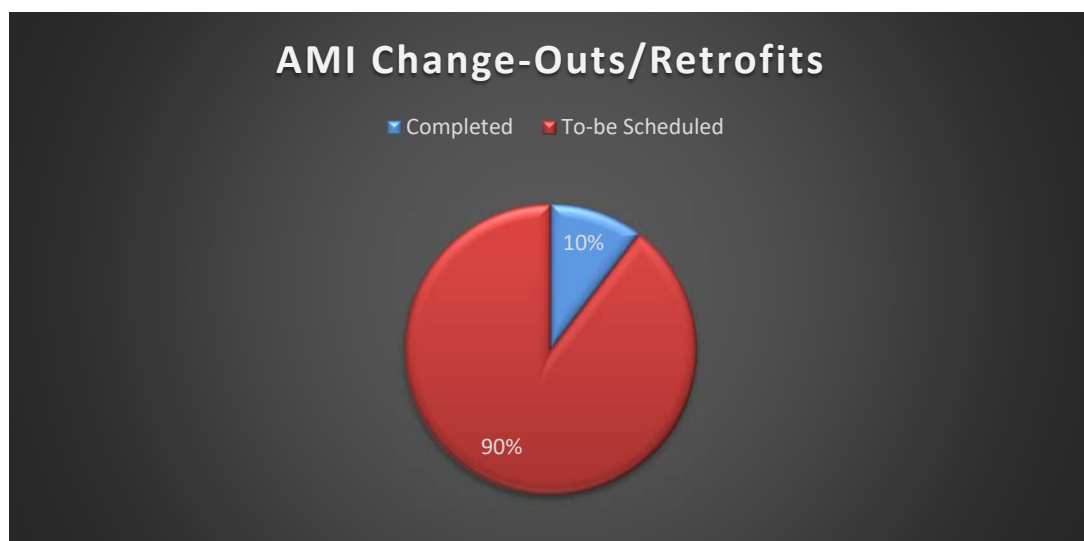
## AGENDA ITEM EXECUTIVE SUMMARY

<b>AGENDA TITLE:</b> Advanced Metering Infrastructure (AMI) Monthly Update  <b>STAFF CONTACT/PREPARER:</b> Quin Lunsford, Director of Finance	<b>AGENDA DATE:</b> March 16, 2023  <b>ACTION:</b> Informational  <b>ATTACHMENTS:</b> No
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**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:

- Meter supply continues to improve and has reached the threshold for re-deployment. The ACSA team is working closely with the contractor to plan the final phase of deployment. These plans include staging inventories, targeted customer communications, and readiness of teams to ensure successful deployment. We anticipate fieldwork to resume in April 2023 for the remaining 20,000 ACSA meters.
- A comprehensive update will be presented at today's Board meeting to recognize accomplishments and provide an overview of project related tasks scheduled for the remainder of the year. Going forward, we will include the chart below to reflect installations as a percentage of the total meter population that has been upgraded.



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

**BUDGET IMPACT:** Informational only.

**RECOMMENDATIONS:** None

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

**ATTACHMENTS:** N/A

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<p><b>AGENDA TITLE:</b> Proposed FY 2024 Capital Improvement Program (CIP)</p> <p><b>STAFF CONTACT(S)/PREPARER:</b> Jeremy M. Lynn, P.E., Director of Engineering</p>	<p><b>AGENDA DATE:</b> March 16, 2023</p> <p><b>ACTION:</b> ■ <b>INFORMATION:</b> ■</p> <p><b>ATTACHMENTS:</b> YES</p>
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**BACKGROUND:** ACSA staff have prepared the proposed FY 2024 Capital Improvement Program (CIP) Budget consisting of 29 projects, eight of which are non-utility projects. The water projects primarily address infrastructure replacement and upgrades. The wastewater projects address infrastructure rehabilitation and replacement, pump station upgrades, and extension of public sewer to existing subdivisions. The eight non-utility projects address operational improvements, such as: mitigation of risk to increase resiliency of critical water and wastewater assets; IT and Finance system improvements; increased energy conservation throughout all our operations; development of the Avon Operations Center; replacement of fire suppression system; and a records management system.

### DISCUSSION:

- Projects with funding that are anticipated to span multiple fiscal years show previous fiscal year budget amounts in parentheses to reflect the project budget to date, not just the contribution to the FY 2024 Rate Model.
- Risk Assessment Improvements does not contribute to the FY 2024 Rate Model because funding for Priorities 1 and 2 were previously incorporated into the Rate Model in earlier years.
- Several projects from the IT Department have funds budgeted in the FY 2024 Rate Model, including Data Management and Dashboarding, ESRI Utility Network Implementation, and the Records Management System.
- Customer Information System (CIS) Replacement funding is included in the FY 2024 Rate Model to include consulting services to assist with a review of current business processes and development of a roadmap towards replacement of the ACSA's current billing and phone systems, and the updating of the ACSA's website.
- Energy Audit funding is included in the FY 2024 Rate Model for the installation of Vehicle Charging Stations.
- Avon Operations Center is the largest contributing project in the FY 2024 Rate Model, accounting for a total of \$4,400,000 split equally between water and wastewater to cover sitework. Construction of the building and facilities are anticipated in FY 2025.
- Advanced Metering Infrastructure (AMI) Implementation funding is included in the FY 2024 Rate Model to reach full deployment.



# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

- The Scottsville Phase 4 Water Main Replacement Project does not contribute to the FY 2024 Rate Model because the design budget amount has already been incorporated and construction is not anticipated until FY 2025.
- The Northfields Water Main Replacement Project does not contribute to the FY 2024 Rate Model because the design budget amount has already been incorporated and construction is not anticipated to begin until FY 2026.
- The Huntington Village Water Connection Project does not contribute to the FY 2024 Rate Model because the construction budget amount was already incorporated into the Rate Model in FY 2021. Construction is anticipated in FY 2024.
- The Exclusion Meters Replacement and Pipe Saddles Replacement Projects do not contribute to the FY 2024 Rate Model because construction funding was previously incorporated into the Rate Model in previous fiscal years. Construction is anticipated to continue in FY 2024.
- The Briarwood Water Main Replacement Project does not contribute to the FY 2023 Rate Model because the design budget amount has already been incorporated and construction is not anticipated to begin until FY 2027.
- Additional design funds for the Townwood Water Main Replacement Project are included in the FY 2024 Rate Model. Construction is not anticipated to begin until FY 2028.
- The Raintree and Fieldbrook PVC Water Main Replacement Project does not contribute to the FY 2024 Rate Model because the design budget amount was already incorporated into the Rate Model in FY 2022. Construction is not anticipated to begin until FY 2027.
- The Airport Trunk Sewer Upgrade Project does not contribute to the FY 2024 Rate Model because the design budget amount has been previously incorporated into the Rate Model and construction is not anticipated to begin until FY 2026.
- The Bellair – Liberty Hills Sewer Project does not contribute to the FY 2024 Rate Model because the design budget amount has been previously incorporated into the Rate Model and construction is not anticipated to begin until FY 2025.
- Construction funds for the following water main replacement projects are included in the FY 2024 Rate Model: Ragged Mountain Phase 1, Crozet Phase 4, Barracks West, Broadway Street, and Annual Water Repair and Rehabilitation.
- Construction funds for wastewater projects in the FY 2024 Rate Model are included for Miscellaneous Sewer Rehabilitation, Madison Office Park Pump Station Upgrade, and Pump Stations – Rehabilitation.
- Water expenditures (59%); Sewer expenditures (41%).
- Water main replacement (53%) of water expenditures; sewer upgrades and rehabilitation (20%) of sewer expenditures.

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

- Existing projects (89%); New projects (11%).
- Questions about proposed CIP Projects.

**BUDGET IMPACT:** The FY 2024 CIP Budget will be used to establish user rates and connection fees.

**RECOMMENDATIONS:** Authorize ACSA staff to proceed with a public hearing on the FY 2024 CIP Budget.

**BOARD ACTION REQUESTED:** Authorize the advertisement for a public hearing to address the FY 2024 CIP at the April Board meeting on April 20, 2023.

**ATTACHMENTS:**

- Detailed memo summarizing the proposed FY 2024 CIP Projects and their anticipated funding.
- Powerpoint Presentation – Capital Improvement Program FY 2024 – New Projects.





# MEMORANDUM

**To:** Board of Directors  
**From:** Jeremy M. Lynn, P.E., Director of Engineering  
**Date:** March 16, 2023  
**Re:** FY 2024 Capital Improvement Program (CIP)  
**cc:** Michael E. Derdeyn

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Projects included in the Albemarle County Service Authority's (ACSA) 10-year Capital Improvement Program (CIP) from FY 2024 to FY 2033 will appear in the Proposed FY 2024 Budget document. The estimates developed for these projects have been entered into *Schedule 6: Capital Improvement Projects* of the Rate Model. The following is a summary of the estimated project costs to be undertaken in FY 2024:

Water Projects:	\$ 7,227,000
Wastewater Projects:	<u>\$ 4,325,000</u>
<b>Total:</b>	<b>\$11,552,000</b>

Overall, approximately 38% of the funds to be expended this fiscal year are anticipated to go towards the Avon Operations Center. On the water side, approximately 53% of these funds will be used to replace aging and undersized pipelines. On the wastewater side, over 20% of the funds will address upgrades or rehabilitation of the existing collection system to reduce infiltration and inflow (I/I). Of the total \$11,552,000 budgeted, existing projects account for \$10,182,000, while new projects are estimated at \$1,370,000.

The new projects identified in the upcoming FY 2024 CIP include the replacement of the fire suppression system at the Spotnap location, implementation of a records management system, an annual water repair and replacement contract similar to the current sewer find and fix program, and a renewed effort to maintain and update our water and wastewater pump stations. The Maintenance Department will continue to construct some of the CIP Projects. A summary of the proposed CIP projects with their anticipated funding in FY 2024 follows:

**Risk Assessment Improvements:** As part of the on-going preparedness program for the ACSA to remain resilient, a Vulnerability Assessment was completed in conjunction with our community partners. All our critical assets were analyzed for risks caused by both natural and human-made hazards, using

the AWWA Standard J100: *Risk and Resilience Management of Water and Wastewater Systems*. The result was a report establishing mitigation measures to lower risks and increase resiliency. Some mitigation measures such as industrial strength locks, perimeter security lighting and cameras, and access control signage have been completed. Construction of Priority 1 improvements is nearing completion and Priority 2 will follow with funds already budgeted. Additional funds are anticipated in FY 2026 to cover design and construction of Priorities 3 and 4. **FY 2024 Budget - \$0 (FY 2019, FY 2020, and FY 2022 Budgets - \$641,950)**

**Data Management and Dashboarding:** This project satisfies one of the recommendations from the IT Security Assessment conducted in June 2021 and is also a focus area of the upcoming 2023-2025 Strategic Plan. The first phase includes consulting services to assist staff with data gathering and classification along with a detailed needs analysis of what data staff members need to have access to for their various job responsibilities. Following this data collection phase, our consultant will design and build appropriate dashboards. These dashboards will display relevant data in a graphical format for staff members while restricting their permissions to the raw data. Additionally, dashboards will provide a way for staff to utilize business intelligence and analytics for further data manipulation. The amount budgeted combined with funds previously appropriated will cover the data gathering and needs analysis phase, as well as the dashboard development. These funds are divided equally between water and wastewater projects. **FY 2024 Budget - \$20,000 (FY 2023 Budget - \$20,000)**

**Customer Information System (CIS) Replacement:** This project consists of consulting services to assist with a review of the Customer Experience, current business processes and technology as well as development of a roadmap moving forward. These services will also include Request for Proposals (RFP) development, review of proposals, and contract negotiations. The consultant will assist in the procurement process and subsequently during development to ensure a stable transition for our customers and ACSA staff. The work will also include integration with other systems, specifically the Advanced Metering Infrastructure, Enterprise Resource Planning System, website design and phone replacement. The amount budgeted is for funding to complete the assessments, develop/analyze the RFPs, and contract negotiations. These funds are divided equally between water and wastewater projects. Additional funding is anticipated in FY 2025 for full development. **FY 2024 Budget - \$150,000 (FY 2023 Budget - \$50,000)**

**ESRI Utility Network Implementation:** This project consists of consulting services to develop a plan and fully implement the Utility Network in the ACSA's ArcGIS Enterprise environment. The consultant will assess the state of the ACSA's GIS and recommend changes needed for successful implementation of the Utility Network and assist with this conversion. Once these changes are complete, the consultant will migrate the existing GIS database to the Utility Network, train staff on use of the technology, and provide post go-live support. The amount budgeted combined with funds previously appropriated will cover the

feasibility study and implementation anticipated in FY 2024. These funds are divided equally between water and wastewater projects. **FY 2024 Budget - \$150,000 (FY 2023 Budget - \$50,000)**

**Energy Audit:** A comprehensive energy audit of the existing Operations Center and all pump stations was recently completed that evaluated current energy consumption and analyzed utility rate structures to identify potential cost savings. Surveys were conducted on all systems, including operation and maintenance procedures to determine where energy conservation could be improved. The amount budgeted will allow installation of Vehicle Charging Stations at the Operations Center, assuming electric vehicles are added to the ACSA fleet. These funds are divided equally between water and wastewater projects. **FY 2024 Budget - \$50,000 (FY 2020 and FY 2023 Budgets - \$340,000)**

**Avon Operations Center:** The Avon Street property has long been held as a future location to build additional facilities as the ACSA continues to grow. The current Maintenance Yard at our Spotnap Road location is becoming overcrowded, and our leased space at the Crozet Water Treatment Facility will be reduced with the upcoming Granular Activated Carbon (GAC) Expansion. 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. The amount budgeted is to cover clearing and grading, stormwater and utilities, and site work of this site in FY 2024. These funds are divided equally between water and wastewater projects. Additional funding will be required in FY 2025 to finish construction. **FY 2024 Budget - \$4,400,000 (FY 2020, FY 2021, FY 2022, and FY 2023 Budgets - \$4,390,000)**

**ACSA Facilities – Fire Suppression System Replacement (New):** 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. The amount budgeted is for full replacement of the system anticipated in FY 2024. These funds are divided equally between water and wastewater projects. **FY 2024 Budget - \$750,000**

**Records Management Project (New):** The goal of this project is to improve record compliance and retention while digitizing paper files currently in storage. This project will consist of the classification of each paper document, so it is stored and maintained properly and securely. Another large portion of this project will include the scanning of paper documents into a new software solution that creates a searchable digital file. Files will be organized across the ACSA so that the right people have access to the appropriate content whether they are in the office or working remotely. The amount budgeted will cover the purchase of scanners and software solution as well as the effort associated with document scanning. These funds are divided equally between water and wastewater projects. **FY 2024 Budget - \$300,000**

**Advanced Metering Infrastructure (AMI) Implementation:** This project addresses a goal in our Strategic Plan to convert our existing metering system to an AMI System. Ten collectors (antennas) and associated hardware have been installed along with more than 2,200 functioning AMI meters. Full deployment of the remaining 20,000 meters is anticipated to begin in April 2023. The amount budgeted combined with funds previously appropriated will cover the remaining efforts to achieve full deployment. These funds are divided equally between water and wastewater projects. **FY 2024 - \$800,000 (FY 2018, FY 2020, and FY 2022 Budgets- \$7,700,000)**

**Scottsville Phase 4 Water Main Replacement:** This project continues our systematic program to replace undersized and deteriorating asbestos-cement and cast-iron water mains throughout our water systems. The water mains along James River Road, Warren Street, and several streets in Downtown Scottsville will be upgraded. Design efforts are nearing completion and easement acquisition efforts will likely take the majority of FY 2024. Construction is not anticipated to occur until FY 2025 and beyond with additional funds required. **FY 2024 Budget - \$0 (FY 2018, FY 2020, and FY 2023 Budgets - \$504,900)**

**Ragged Mountain Phase 1 Water Main Replacement:** This project will replace the oldest active water main remaining in our system. This cast iron pipe is over 90 years old and is severely tuberculated, which greatly reduces the flow capacity in this section. Design of this project is nearly complete, and construction is anticipated immediately following completion of VDOT's Morey Creek Bridge Replacement Project. The amount budgeted will allow construction to begin later in FY 2024 and will carry over into FY 2025 with additional funds required. **FY 2024 Budget - \$342,000 (FY 2020 and FY 2023 Budgets - \$534,400)**

**Crozet Phase 4 Water Main Replacement:** This project continues our systematic program to replace undersized and aging asbestos-cement and PVC water mains in the Crozet Water System. This is the fourth of five phases in Crozet that have been defined to carry out these water distribution system improvements. The design is complete and easement acquisition is nearly complete with funds previously appropriated. The amount budgeted will allow construction to begin in FY 2024 and will carry over into FY 2025 with additional funds required. **FY 2024 Budget - \$2,175,000 (FY 2019, FY 2020, and FY 2023 Budgets - \$1,947,350)**

**Northfields Water Main Replacement:** This project continues our systematic program to replace undersized and deteriorating asbestos-cement water mains. These existing water mains were installed in the 1960's as a private well system and have reached the end of their useful life. The project is currently under design with funds previously budgeted. It is anticipated that construction will occur in the FY 2026 – FY 2027 timeframe. Additional funding will be required based on ultimate construction schedule. **FY 2024 Budget - \$0 (FY 2020 Budget - \$530,000)**

**Huntington Village Water Connection:** The existing water main that serves as the only feed into Huntington Village off Old Ivy Road is vulnerable 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. Design is complete, and construction is expected to be completed in FY 2024 with funds previously budgeted. **FY 2024 Budget - \$0 (FY 2021 Budget - \$60,700)**

**Exclusion Meters Replacement:** 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 for irrigation purposes. Private meters were installed behind their ACSA domestic meter to record this volume and it was "excluded" from the calculation of their sewer charges and these became known as exclusion meters. In 2006 the ACSA Rules and Regulations were modified to disallow exclusion meters and required all future irrigation meters be tapped separately off our water mains, to be owned and controlled by the ACSA. ACSA crews have worked the last four years to install dedicated, ACSA-owned irrigation meters to replace these exclusion meters in our system. ACSA staff is currently evaluating alternative options that would address the remaining private exclusion meters. **FY 2024 Budget - \$0 (FY 2020 and FY 2021 Budgets - \$527,500)**

**Pipe Saddles Replacement:** The ACSA Maintenance Department has discovered in recent years that pipe saddles used to make water service line connections to PVC water mains have started to fail. These failures have occurred due to either the galvanized steel straps or the cast iron saddle bodies deteriorating. This project is a multi-year replacement program to be undertaken with our in-house CIP Crew. Work will be performed with funds previously budgeted. Additional funding is anticipated in future years to complete this project. **FY 2024 Budget - \$0 (FY 2020 and FY 2021 Budgets - \$100,000)**

**Briarwood Water Main Replacement:** 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. The design phase is currently underway with funds previously appropriated. Construction is expected to take place in FY 2027 with additional funding budgeted. **FY 2024 Budget - \$0 (FY 2021 Budget - \$220,000)**

**Barracks West Water Main Replacement:** 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 will also provide for an opportunity to improve fire protection to these multi-family apartments. The design phase is currently underway with funds previously appropriated. Construction of this project is anticipated to begin in late FY 2024 and carryover into FY 2025 with additional funding required. **FY 2024 Budget - \$450,000 (FY 2022 Budget - \$452,500)**



**Townwood Water Main Replacement:** 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. The design phase is currently underway and will carry over into FY 2024 with funds previously appropriated. The amount budgeted will supplement funds previously appropriated to cover design phase efforts. Construction is expected to take place in FY 2028 with additional funds required. **FY 2024 Budget - \$30,000 (FY 2023 Budget - \$170,000)**

**Broadway Street Water Main Replacement:** This project will replace the cast 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. Construction is expected to take place in FY 2024. The amount budgeted combined with funds previously appropriated should cover construction costs anticipated for this project. **FY 2024 Budget - \$625,000 (FY 2021 and FY 2023 Budgets - \$792,800)**

**Raintree and Fieldbrook PVC Water Main Replacement:** This project continues our systematic program to replace the PVC water mains that have been in service since the 1980's. The design phase is currently underway and will carry over into FY 2024 with funds previously appropriated. Construction is expected to take place in the FY 2027 - FY 2028 timeframe with additional funds required. **FY 2024 Budget - \$0 (FY 2022 Budget - \$432,300)**

**Annual Water Repair and Replacement (New):** ACSA staff have identified the need to establish a construction contract to complete small water main replacement projects in a more efficient and timely manner on an as-needed basis. This work will utilize a publicly bid contract that is renewable on an annual basis up to two times after the initial year long contract. Bidding for this contract is anticipated this spring. **FY 2024 Budget - \$200,000**

**Pump Stations – Rehabilitation (New):** ACSA staff have identified numerous rehabilitation projects directly related to our pump station facilities, including pump and motor upgrades, replacement of generators and transfer switches, control panels, grinders, and associated climate control. The amount budgeted will cover climate control upgrades to three water pump stations and five sewer pump stations anticipated in FY 2024. Additional funding in future years is expected to meet other rehabilitation needs mentioned above. These funds are proportionally split between water and wastewater projects. **FY 2024 Budget - \$120,000**

**Airport Trunk Sewer Upgrade:** With the continued growth in the Hollymead Town Center area, the existing sewer collector serving the airport and the area west of Route 29 needs upgrading 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. Design is ongoing and easement acquisition is underway with funds previously budgeted. It is anticipated that construction will begin in FY 2026, with additional funding required. **FY 2024 Budget - \$0 (FY 2021 and FY 2023 Budgets - \$483,800)**

**Northfields Phase 5 Sewer:** During the design of the Northfields Water Main Replacement Project, ACSA staff identified several sections of sanitary sewer that could be installed along the roadway in coordination with the water main replacement work. These efforts will provide sanitary sewer service to existing neighborhood properties currently served by private septic fields. The project is currently under design with funds previously budgeted. It is anticipated that construction could occur in the FY 2026 – FY 2027 timeframe with additional funding required. **FY 2024 Budget - \$0 (FY 2023 Budget - \$70,000)**

**Madison Office Park Pump Station Upgrade:** This wastewater pump station was constructed in the early 1980's by private development and the original equipment is wearing down. In addition, 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 SCADA System. A contract has been executed and construction activities to replace the pump station are expected to occur in the first half of FY 2024. The amount budgeted combined with funds previously appropriated should cover construction costs anticipated for this project. **FY 2024 Budget - \$390,000 (FY 2015, FY 2017, FY 2018, FY 2020, FY 2021, FY 2022, and FY 2023 Budgets - \$1,550,000)**

**Miscellaneous Sewer Rehabilitation:** This project continues our “find and fix” program of sanitary sewer rehabilitation to reduce I&I in our system during the fiscal year. These efforts will utilize publicly bid miscellaneous sewer rehabilitation contracts that are renewable on an annual basis up to two times after the initial year long contract. It will be used to make repairs and rehabilitate problems in our system found with systematic CCTV inspection by ACSA crews and the subcontractor. **FY 2024 Budget - \$500,000**

**Bellair – Liberty Hills Sewer:** 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. Based on results from a community survey, a majority of the property owners are interested in connecting to public sewer if it was made available. Design is underway with funds previously appropriated. It is anticipated that construction will take place in FY 2025 and FY 2026, with additional funding required in those years. **FY 2024 Budget - \$0 (FY 2021 and FY 2022 Budgets - \$393,715)**

**Developer Participation:** Each year funds are set aside to participate in oversizing utilities constructed to serve new development. The Rate Model includes \$100,000 divided equally between water and wastewater projects as a contingency to ensure new pipes are sized to meet the ACSA's long-range needs. **FY 2024 Budget - \$100,000**

We propose to schedule a Public Hearing to present the FY 2024 CIP at the April meeting of the ACSA Board of Directors.

**Board Action**

We request that the Board of Directors authorize the advertisement for a Public Hearing to address the FY 2024 CIP at 9:00 a.m. on Thursday, April 20, 2023.



# CAPITAL IMPROVEMENT PROGRAM FY 2024 - NEW PROJECTS

ACSA Board Meeting - March 16, 2023



# Presentation Outline



HIGHLIGHTS -  
PROPOSED FY 2024  
CIP BUDGET



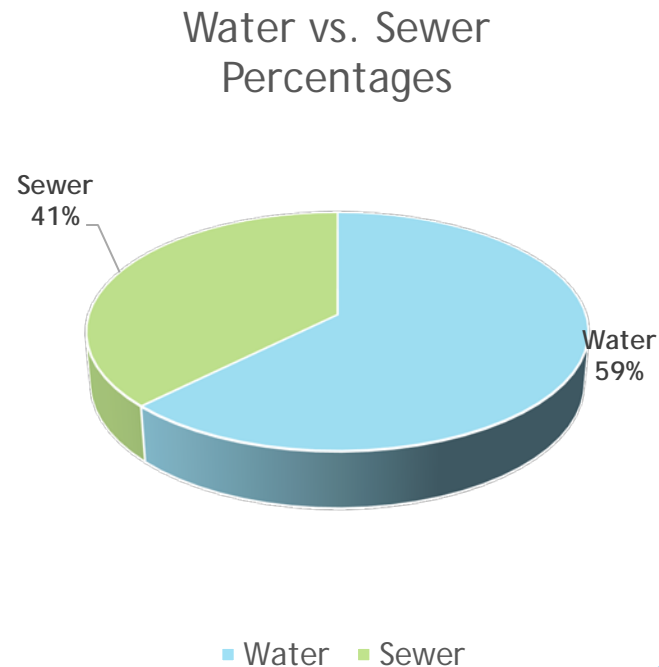
NEW PROJECTS TO  
FY 2024 CIP BUDGET



QUESTIONS AND  
NEXT STEPS

# Highlights - Proposed FY 2024 CIP Budget

- ▶ Total FY 2024 CIP Budget - \$11,552,000
- ▶ New Projects - \$1,370,000 (Approx. 12%)
  - ▶ ACSA Facilitates - Fire Suppression System Replacement
  - ▶ Records Management Project
  - ▶ Annual Water Repair and Replacement
  - ▶ Pump Stations - Rehabilitation



## ACSA Facilities - Fire Suppression System Replacement

- ▶ Complete system replacement due to severe internal pipe corrosion
- ▶ System beyond useful life
- ▶ Design/Build Contract
- ▶ Construction in FY 2024
- ▶ FY 2024 - \$750,000 (split between water and sewer)



# Records Management Project

- ▶ Improve record compliance and retention
- ▶ Reduce physical storage needs
- ▶ Scanning of paper documents for improved access and efficiency
- ▶ FY 2024 - \$300,000 (split between water and sewer)





# Annual Water Repair and Replacement



- ▶ Annual Services Contract
- ▶ Addresses smaller projects less conducive to normal Design-Bid-Build Process
  - ▶ Huntington Village Water Connection
  - ▶ Lewis Hill - West Leigh Connection
  - ▶ Pipe Saddles
- ▶ FY 2024 - \$200,000

# Pump Stations - Rehabilitation

- ▶ Climate Control Upgrades
- ▶ Water Pump Stations - Mill Creek, Mosby Mountain, Northfields
- ▶ Sewer Pump Stations - Glenmore, Crozet, Old Forge, Georgetown Green, Briarwood
- ▶ FY 2024 - \$120,000



# Questions and Next Steps

- ▶ Board Action Today - Authorize Advertisement for a Public Hearing to address the FY 2024 CIP
- ▶ April 20, 2023 - Public Hearing on Proposed FY 2024 CIP, which will include a presentation on all CIP Projects
- ▶ May 18, 2023 - Proposed FY 2024 Budget and Rates Workshop
- ▶ June 15, 2023 - Public Hearing and Adoption of FY 2024 Budget, Rates and CIP

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

<b>AGENDA TITLE:</b> Advanced Metering Infrastructure (AMI) Update	<b>AGENDA DATE:</b> March 16, 2023
<b>STAFF CONTACT/PREPARER:</b> Quin Lunsford, Director of Finance	<b>ACTION:</b> Informational
	<b>ATTACHMENTS:</b> Yes

**BACKGROUND:** The ACSA Board authorized staff at its October 2019 meeting to execute agreements related to the AMI project and monthly status updates have been provided to the board. The final phase of the AMI project will commence on April 4, 2023.

**DISCUSSION:** Authority staff has been working toward a full AMI system implementation for the last four years. The project began with a feasibility study in 2018, a competitive procurement process in 2019, installation of collector sites (antenna), and three smaller deployment phases to ensure the program would be successful. As we approach the final phase of installations, a presentation has been prepared summarizing the project/technology, reviewing milestones, deployments, customer communications, and AMI successes.

**BUDGET IMPACT:** Informational only.

**RECOMMENDATIONS:** None

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

**ATTACHMENTS:** AMI – Full Deployment Presentation (PowerPoint)





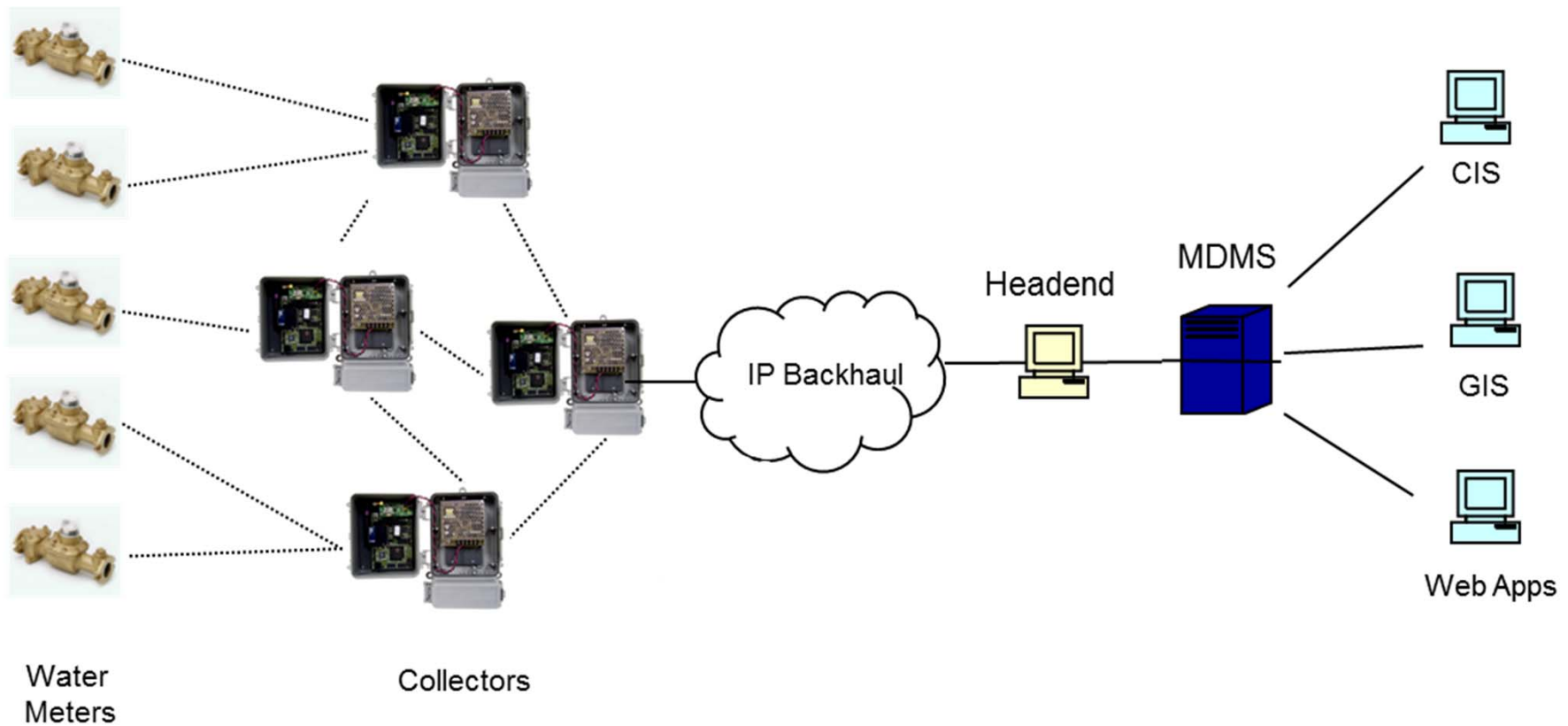
# Advanced Metering Infrastructure (AMI) Update

March 16, 2023

# AMI Update

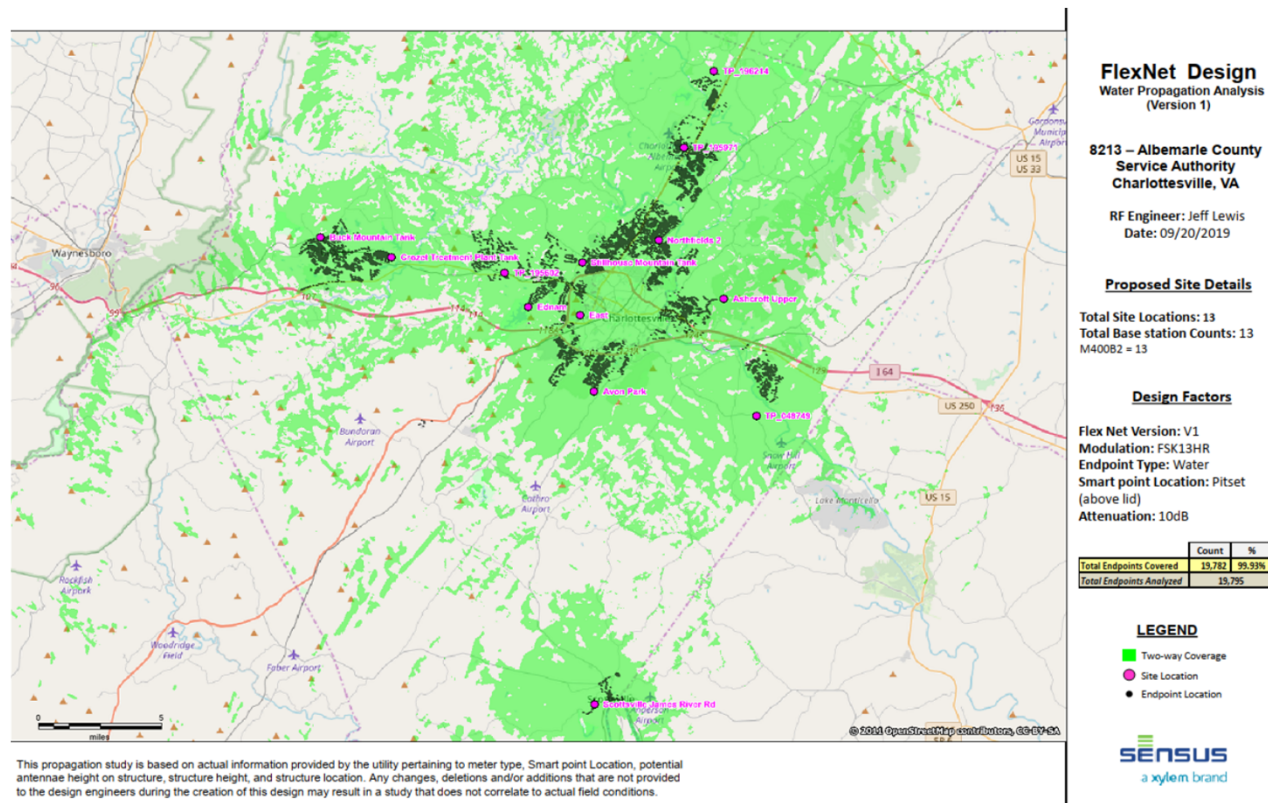
- Overview of Advanced Metering Infrastructure
- Project Milestones
- Full Deployment
- Customer Communications
- AMI Successes

# Overview of AMI

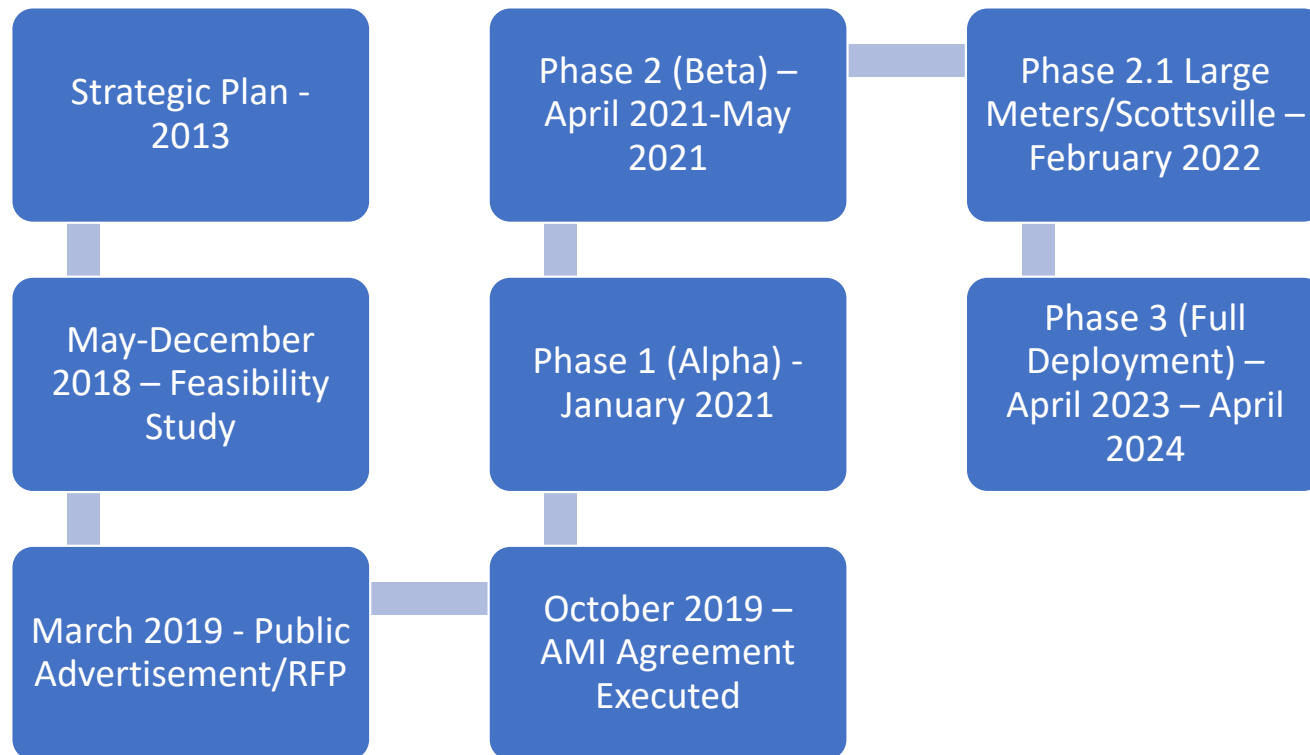




# Overview of AMI – Antenna Locations

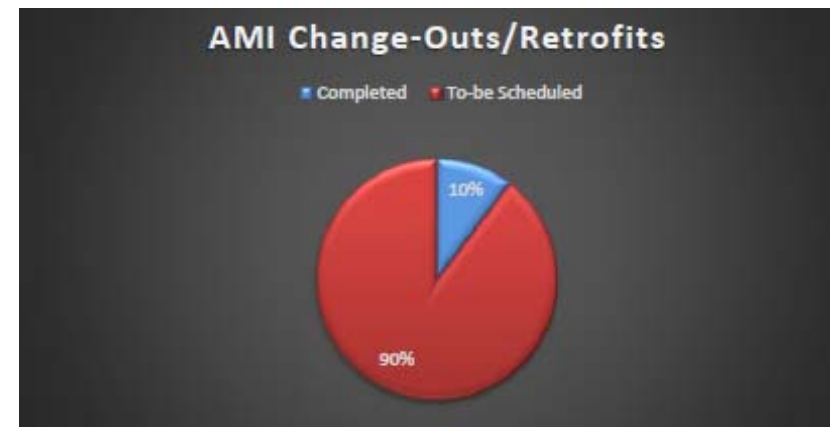


# AMI Project Milestones



# Full Deployment

- Scheduled to begin April 4, 2023
- Approximately 8,000 meter to be installed (inventory on-hand and available for installation)
- Approximately 12,000 “retro-fits” to be installed
- 60 installations/day for first weeks of deployment
- If “retro-fit” inventory is received earlier than anticipated, installations/day to increase



# Customer Communications

- PSA video on ACSA website
- Letter mailed to customers at least 30 days in advance of install
- Post-card to be mailed roughly 14 days prior to install
- Doorhanger provided after installation



Dear Valued Customer,

The Albemarle County Service Authority (ACSA) is writing you today to inform you about MyWater, a utility innovation program that uses advanced technology and the highest levels of customer service to continually provide you with the cleanest water possible.

As part of our MyWater program, the ACSA is upgrading water meters throughout our service area. These new meters use Advanced Metering Infrastructure to safely and securely deliver information about your water usage directly to the ACSA.

In the coming months, the new meters will allow both you and the ACSA to proactively review water usage data in near-real time, enabling you to manage your account more effectively as we service it with greater efficiency. Notifications on leaks, high usage, outages, and other events will be part of the program, helping you avoid costly repairs and higher bills while we all cut water waste.

You can expect meter technicians from our installation contractor, Professional Meters Inc. (PMI), in your area over the next few weeks. Each technician will be dressed in uniform, have signage on their vehicle, and possess valid photo identification. The ACSA and PMI will follow all relevant public health guidelines to ensure your safety while we conduct our work.

During the meter upgrade, you may experience a brief interruption of water service of approximately 30 minutes. Once the visit is complete, technicians will leave a door tag behind with information on the work performed and steps you may need to take if your service was interrupted. You do not need to contact us in advance to schedule an appointment for your meter upgrade.

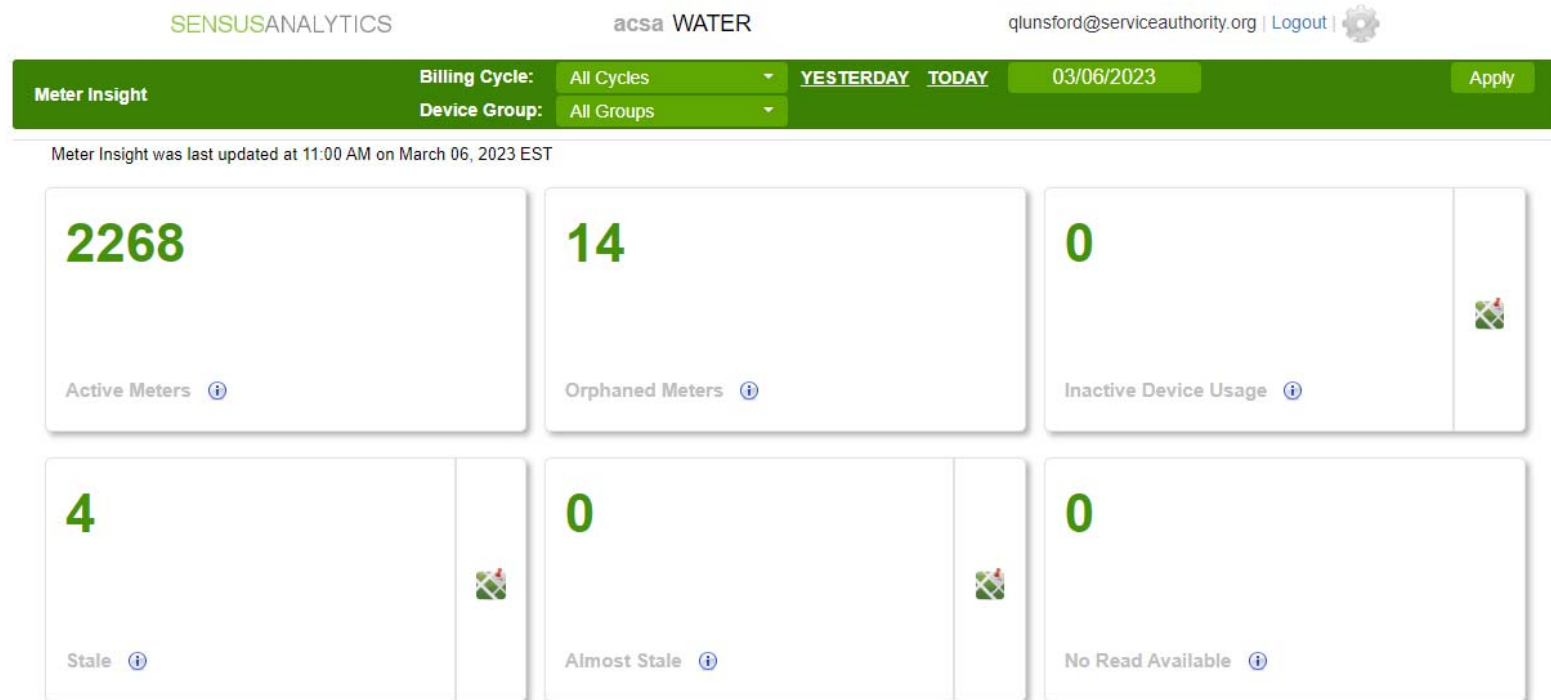
We appreciate your patience during this process and will do our best to minimize any inconvenience. For more information about our MyWater program and your water meter upgrade, please visit [www.serviceauthority.org](http://www.serviceauthority.org) or call us at (434) 977-4511.

Sincerely,

Gary O'Connell  
Executive Director  
Albemarle County Service Authority (ACSA)



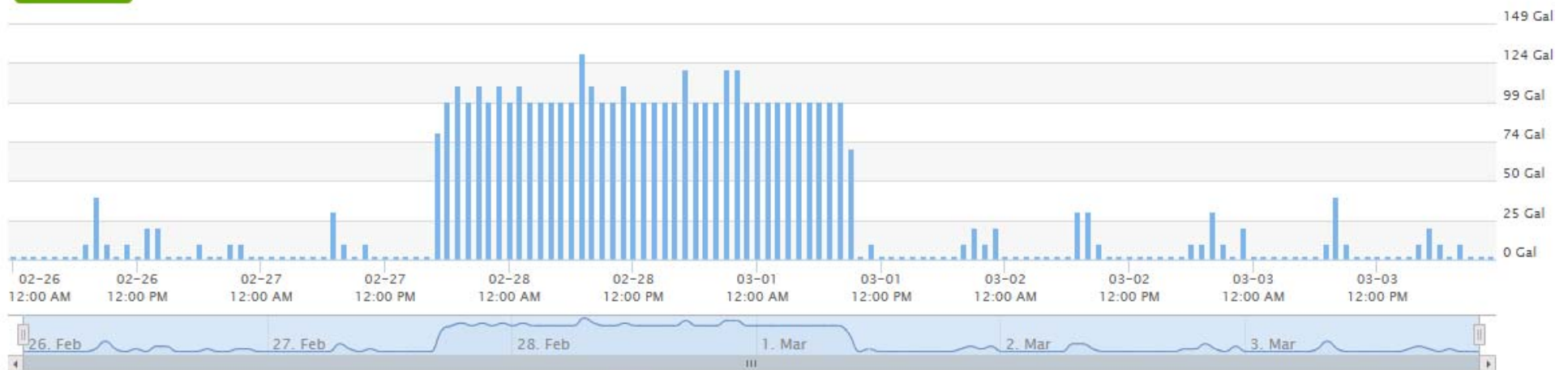
# AMI Successes – Current Installations



# Leak Detection – Customer

Volume (Gal)

Download



# Auto-Flusher Monitoring

- ACSA monitors Automatic Water Flushing Devices (Auto-Flushers) using the AMI system
  - Automated daily report to multiple employees within the engineering department
  - Provides important information related to operation of Auto-Flushers

Address	Phone	Lat	Lon	Service Type	Device Status	Commodity	Meter Size	Factored First Read	Factored Last Read	Factored Consumption	UoM
Total										10,659	GAL
Meriwether Lewis Auto Flusher, Charlottesville, VA, 22901	(434) 977-4511	38.081497	-78.59883	Urban W-Industrial	ACTIVE	WATER	1.0	2,254,670	2,259,577	4,907	GAL
Scottsville Auto Flusher, Scottsville, VA, 24590	(434) 977-4511	37.796875	-78.486084	Scvl W - Industrial	ACTIVE	WATER	0.75	6,615,481	6,619,553	4,072	GAL
Thurston Dr Auto Flusher, Crozet, VA, 22932	(434) 977-4511	38.08049	-78.68423	Cr W - Industrial	ACTIVE	WATER	1.0	8,131,260	8,132,940	1,680	GAL
RWSA Site ACSA Auto Flusher, Charlottesville, VA, 22901	(434) 977-4511	38.017296	-78.4563	Urban W-Industrial	ACTIVE	WATER	1.0	9,224,489	9,224,489	0	GAL
Michie Tavern Auto Flusher, Charlottesville, VA, 22901	(434) 977-4511	38.01012	-78.47028	Urban W-Industrial	ACTIVE	WATER	1.0	2,832,269	2,832,269	0	GAL
North Pines Auto Flusher, Charlottesville, VA, 22911	(434) 977-4511	38.17197	-78.43462	Urban W-Industrial	ACTIVE	WATER	1.0	226,199	226,199	0	GAL
Hillsboro Auto Flusher, Crozet, VA, 22932	(434) 977-4511	38.046112	-78.7261	Cr W - Industrial	ACTIVE	WATER	1.0	803,407	803,407	0	GAL
Grayrock Auto Flusher, Crozet, VA, 22932	(434) 977-4511	38.074	-78.72104	Cr W - Industrial	ACTIVE	WATER	1.0	374,691	374,691	0	GAL



# Scottsville/Red Hill Water System Monitoring

- ACSA monitors water consumption for Scottsville and Red Hill service areas using automated reports from the AMI system
- Reports are used to identify possible leaks on the customer side that could negatively impact these systems
- The ACSA Engineering Group monitors regularly and coordinates with appropriate partners when irregularities are identified







## In Summary

- The ACSA team is prepared for the upcoming deployment
- Customer interactions through the previous phases have been very positive, early leak identification and assistance with resolution
- Future Information available for:
  - Comprehensive Water Audits
  - Additional leak detection capabilities
  - Enhanced system monitoring

# Special Thanks

- The AMI project has and will continue to provide transformational opportunities for our Customers and makes available additional tools and information as Authority staff strives to provide “best-in-class” service.
- Collaboration from the Administrative, Maintenance, Information Technology, Engineering and Finance teams has been critical throughout the life of the project and provided many opportunities for organizational team growth.
- Special thanks to:
  - Kenny Barrow, Terri Knight, Jeremy Lynn, April Walker, and Gary O’Connell for serving on the AMI project team
  - The Engineering team, for implementing/leveraging available information
  - The ACSA Facilities/IT team for collector site installations/coordination across our service area
  - The Customer Service team in their adoption of new technologies for billing and also customer notifications as possible water leaks are identified
  - And finally, the dedicated Meter Operations team that has supported field deployments and mastered new tasks required for AMI installations



**ALBEMARLE COUNTY SERVICE AUTHORITY****AGENDA ITEM EXECUTIVE SUMMARY****CONSENT AGENDA****AGENDA TITLE:** Strategic Plan 2023-2025**STAFF CONTACT(S)/PREPARER:**  
ACSA Leadership Team**AGENDA DATE:** March 16, 2023**ACTION:** Informational**ATTACHMENTS:** Yes

**BACKGROUND:** Beginning in the fall, we held a number of planning and background sessions to develop a proposed new ACSA Strategic Plan for the next three years.

**DISCUSSION:** Based on feedback received from employees, customers, Board, E Source consultants and a Best Practices Panel of Peers, the Leadership Team is proposing the following four themes for our 2023-25 Strategic Plan:


- Data Optimization;
- Business Continuity;
- Customer Experience;
- Employee Experience.

**BOARD ACTION REQUESTED:** Adoption of the Proposed ACSA Strategic Plan 2023-25.

**ATTACHMENTS:** Strategic Plan background materials.



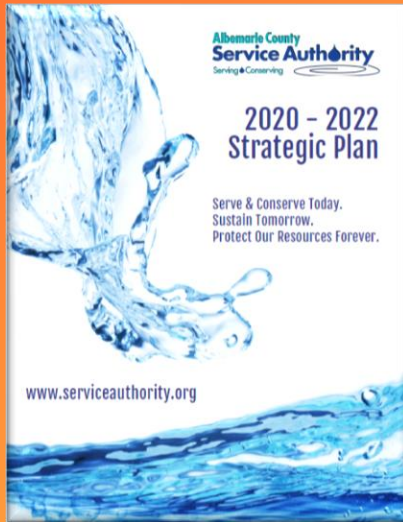
# STRATEGIC PLAN



**The  
Albemarle  
County  
Service  
Authority**

**2023 *through* 2025**

**Board of Directors  
March 16, 2023 Meeting**



# Fulfilling our Strategic Plan

- Safe, Clean, Reliable
- Blueprint for Excellence in Customer Service, Technology and Environmental Sustainability
- Significant Progress on all the Key Initiatives
- Final Three-year Report to the Board in January
- Completed by December 2022

ACSA Strategic Planning  
List of Goals, Strategies, and Implementation Tasks  
2020-2022

Strategy	Implementation Task	Completion Status	Notes	Task Leader & Staff	Actual Completion Status
1. AMT - Advanced Metering	1. Prepare a final recommendation for ACSA Board approval to execute a contract for AMT deployment.	Contract executed. Final contract signed and scheduled to begin in January 2021.	Contract executed.	Scott Lunsford	●
	2. Develop and execute a "pilot" phase of contract (Pilot) phase. Pilot phase.	Final phase of contract. Equipment on order. Software and communications testing complete with test. Two contracts (pilot) and 10 contracts (pilot) installed and tested. POC to be finalized in January 2021.	Successful installation and testing of a limited number of meters, equipment, and software in a controlled environment. The AMT hardware and software integration of meter data from the field, required to the meter data management system (MMS). The intent of the phase is to prove out data, network connectivity and data reliability.	Scott Lunsford	●
	3. Develop and execute a "pilot" phase of contract (Pilot) phase. Pilot phase.	Final phase of contract. Equipment on order. Software and communications testing complete with test. Two contracts (pilot) and 10 contracts (pilot) installed and tested. POC to be finalized in January 2021.	Successful installation and testing of a limited number of meters, equipment, and software in a controlled environment. The AMT hardware and software integration of meter data from the field, required to the meter data management system (MMS). The intent of the phase is to prove out data, network connectivity and data reliability.	Scott Lunsford	●
	4. Develop and execute a "pilot" phase of contract (Pilot) phase. Pilot phase.	Final phase of contract. Equipment on order. Software and communications testing complete with test. Two contracts (pilot) and 10 contracts (pilot) installed and tested. POC to be finalized in January 2021.	Successful installation and testing of a limited number of meters, equipment, and software in a controlled environment. The AMT hardware and software integration of meter data from the field, required to the meter data management system (MMS). The intent of the phase is to prove out data, network connectivity and data reliability.	Scott Lunsford	●
	5. Develop and execute a "pilot" phase of contract (Pilot) phase. Pilot phase.	Final phase of contract. Equipment on order. Software and communications testing complete with test. Two contracts (pilot) and 10 contracts (pilot) installed and tested. POC to be finalized in January 2021.	Successful installation and testing of a limited number of meters, equipment, and software in a controlled environment. The AMT hardware and software integration of meter data from the field, required to the meter data management system (MMS). The intent of the phase is to prove out data, network connectivity and data reliability.	Scott Lunsford	●
	6. Develop and execute a "pilot" phase of contract (Pilot) phase. Pilot phase.	Final phase of contract. Equipment on order. Software and communications testing complete with test. Two contracts (pilot) and 10 contracts (pilot) installed and tested. POC to be finalized in January 2021.	Successful installation and testing of a limited number of meters, equipment, and software in a controlled environment. The AMT hardware and software integration of meter data from the field, required to the meter data management system (MMS). The intent of the phase is to prove out data, network connectivity and data reliability.	Scott Lunsford	●

Project Completion Status: ● Not Started ● Not Started or in Planning Phase ● In Progress ● Completed or Ongoing Strategy

Revised: July 16, 2018  
Updated: July 16, 2018  
Page 1



# Strategic Planning Process

- Fall 2022 Planning Process:
  - Customer Experience – Surveys, Interviews – Customers & Employees;
  - Best Practices Review Panel;
  - Board Strategic Plan Issues Areas – Consideration;
  - Leadership Team Facilitated Workshops – December and January;
  - “Close-out” 2020-22 Strategic Plan – January 2023;
  - Board Presentations on Planning and Background Strategic Issues at the February Meeting;
- Proposed 2022-25 Strategic Plan:
  - March 2023 Present to the Board



## Our Vision

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

## Our Mission

With pride and dedication, we serve our customers by providing clean, safe, and reliable water, exemplary wastewater services, and fire protection infrastructure.

Together with our community partners, we maintain and improve our infrastructure in a timely, cooperative, and financially responsible manner.

## Our Values

The ACSA is committed to providing the highest quality customer service that:

**A – ALIGNS** to our values of honesty, trust, integrity, mutual respect, open communication, and employee empowerment.

**C – COMMITS** to our community through responsiveness and collaboration. We actively promote conservation and environmental stewardship.

**S – STRIVES** for professional excellence by maintaining consistent and fair policies across the organization, and encouraging pride and dedication to ensure a healthy working environment.

**A – ASPIRES** to practice strategic foresight and fiscal responsibility while embracing innovation.

### A align

#### Values

We align ourselves with our core values of honesty, trust, integrity, mutual respect, open communication, and employee empowerment.

### C commit

#### Community

We commit to provide responsive customer service, to collaborate fully with our community partners, and to promote conservation and environmental stewardship.

### S strive

#### Internal Focus

We strive for professional excellence by maintaining consistent and fair policies across the organization, and encouraging and recognizing pride and dedication to ensure a healthy working environment.

### A aspire

#### Future

We aspire to practice strategic foresight and fiscal responsibility while embracing innovation.

**2023**  
*through*  
**2025**

# THE ALBEMARLE COUNTY SERVICE AUTHORITY STRATEGIC PLAN



## 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 Continuity

Ensure the ability to operate effectively and efficiently in the event of manmade or natural disaster and disruption with minimal interruption of service.

### DEVELOP BUSINESS CONTINUITY PLAN

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

### "FIRST COME, FIRST SERVED" POLICY

Formalize a longstanding practice in which new development receives water and sewer service in the order by which they apply for service, and capacity is not reserved.

### 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 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

Not Started

### SUCCESS RESULT

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

0%

2

### DOCUMENT MANAGEMENT SYSTEM

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

### STATUS

Not Started

### SUCCESS RESULT

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

0%

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

Not Started

### SUCCESS RESULT

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

0%



# THE ALBEMARLE COUNTY SERVICE AUTHORITY STRATEGIC PLAN



## Business Continuity

Ensure the ability to operate effectively and efficiently in the event of manmade or natural disaster and disruption with minimal interruption of service.

1	<b>DEVELOP BUSINESS CONTINUITY PLAN</b> Develop a Business Continuity plan to ensure the continual operations during emergencies.	<b>STATUS</b> Not Started	<b>SUCCESS RESULT</b> Completion of a Business Continuity Plan document.	
2	<b>"FIRST COME, FIRST SERVED" POLICY</b> Formalize a longstanding practice in which new development receives water and sewer service in the order by which they apply for service, and capacity is not reserved.	<b>STATUS</b> Not Started	<b>SUCCESS RESULT</b> Revisions to the ACSA Rules and Regulations are adopted by the Board of Directors.	
3	<b>OPTIMIZATION OF RESOURCES</b> Perform an audit of current space, assess staffing levels, and explore opportunities to leverage consulting services in support of staff.	<b>STATUS</b> Not Started	<b>SUCCESS RESULT</b> Current space, staffing levels and evaluation of consultant usage are fully evaluated and recommendations documented.	

# THE ALBEMARLE COUNTY SERVICE AUTHORITY STRATEGIC 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

Not Started

### SUCCESS RESULT

The customer experience vision is defined and enhancements are prioritized.

0%

2

### CUSTOMER INFORMATION SYSTEMS (CIS)

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

### STATUS

Not Started

### SUCCESS RESULT

Implementation of a CIS solution that meets the needs of customers through a stable, streamlined, and integrated platform.

0%

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

Not Started

### SUCCESS RESULT

Pertinent information is provided to customers in their preferred manner.

0%

# THE ALBEMARLE COUNTY SERVICE AUTHORITY STRATEGIC 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

Not Started

### SUCCESS RESULT

Implement recruitment and retention strategies.

0%

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

Not Started

### SUCCESS RESULT

Implement employee engagement strategies.

0%

3

### TRAINING AND EDUCATION PROGRAM

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

### STATUS

Not Started

### SUCCESS RESULT

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

0%

# QUESTIONS?

# ALBEMARLE COUNTY SERVICE AUTHORITY

## AGENDA ITEM EXECUTIVE SUMMARY

<b>AGENDA TITLE:</b> Customer Late Payment - Update  <b>STAFF CONTACT/PREPARER:</b> Quin Lunsford, Director of Finance	<b>AGENDA DATE:</b> March 16, 2023  <b>ACTION:</b> Informational  <b>ATTACHMENTS:</b> Yes
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**BACKGROUND:** Beginning March 17, 2020, the ACSA stopped all disconnections for non-payment in response to the COVID-19 pandemic. During this time, many customers were unable to make payment on their accounts and arrearages to the ACSA grew considerably. The ACSA and our customers were able to participate in Federal/State relief programs described below to help offset some of these outstanding balances. In March 2022, the ACSA began contacting customers in effort to collect and/or establish payment plans to assist our customers. The presentation today will outline progress related to collection efforts.

**DISCUSSION:** In November 2020, the ACSA applied for and received \$180,000 in Federal CARES Act grant funds, passed through the State and the County to directly assist customers that could assert their household experienced a loss of income due to the COVID-19 pandemic. Through this program nearly 300 customers were assisted, and funds related to this grant were exhausted by August 2021.

By September 2021, there were approximately 550 customers that were past due on their accounts and owed more than \$100. Of these 550 customers, 133 owed between \$500-\$999 and 55 owed more than \$1,000.

In October 2021, the ACSA was awarded \$195,000 in Federal State and Local Fiscal Recovery Funds (SLFRF) through the American Recovery Plan Act (ARPA) for the COVID-19 ARPA SLFRF Municipal Utility Assistance Program. This program didn't require customer attestation and was applied to over 400 qualifying accounts. These funds were exhausted by January 2022.

These two grant programs provided much needed financial assistance to many of the ACSA's customers and provided an opportunity for our Customer Service team to contact and establish customer payment plans for amounts still past due. With considerable effort, the team was able to establish 121 individualized payment plans of which 32 have been paid in full.

In October 2022, the ACSA applied and was permitted to participate in the Virginia Low Income Household Water Assistance Program (LIHWAP). This program is administered through the Virginia Department of Social Services and a third party, "Promise," to determine eligibility of customers that apply and remit funds directly on the customer's behalf to the ACSA. The ACSA first received funds in November 2022 and through March 3, 2023 nearly \$30,000 (54 customers) has been applied directly to qualifying ACSA customers.

The LIHWAP program, the customer payment plan program, and the resumption of disconnection for non-payment has greatly improved ACSA collection efforts and are reflected in the age of ACSA water/sewer receivables.



## **ALBEMARLE COUNTY SERVICE AUTHORITY**

### **AGENDA ITEM EXECUTIVE SUMMARY**

Finally, over the course of the last three years, many of the customer's that were carrying past due balances left our service area. Collection efforts on these accounts have been exhausted with approximately 114 accounts written off, totaling \$88,400.

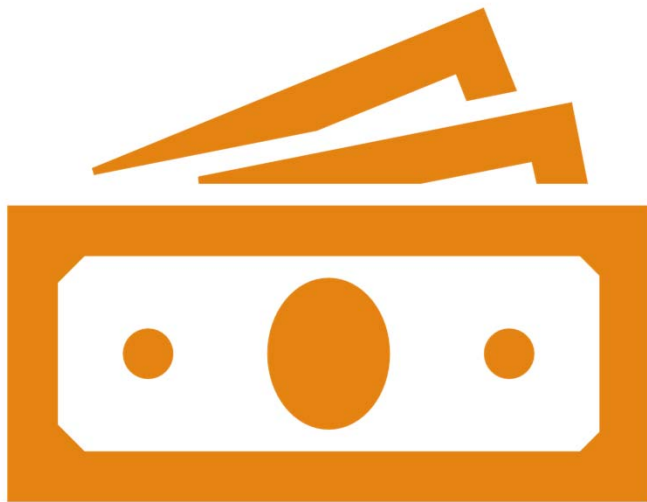
We anticipate past due balances to continue to improve over the course of the next few months due to efforts of the customer service team and customer participation in the LIHWAP program. We have prepared a short presentation to provide an overview of pandemic related programs and their positive impact on our customers and receivable trends.

**BUDGET IMPACT:** Informational only.

**RECOMMENDATIONS:** None

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

**ATTACHMENTS:** Customer Late Payments - Update (PowerPoint)



# ACSA Customer Late Payments - Update

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MARCH 16, 2023

# Agenda

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## Customer Arrearage Grant Programs

- CARES Act
- ARPA
- LIHWAP

## Collection efforts

- Customer outreach related to grant programs
- Establishment of payment plans
- Customer notification of resumption of disconnection for non-payment

## Arrearage Overview/Improvement



# Customer Arrearage Grant Programs

## CARES Act:

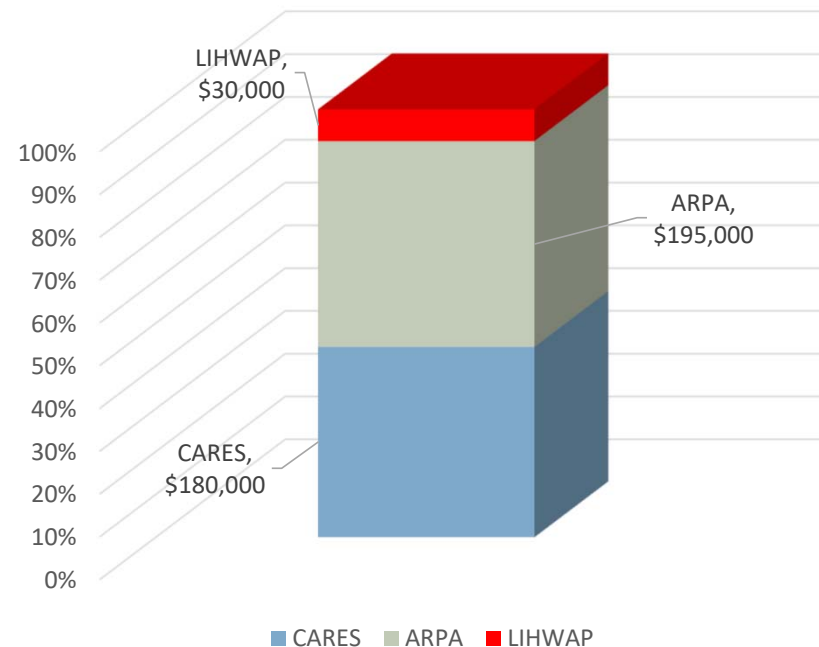
- \$180,000 received
- 300 customers assisted
- Avg. financial relief/customer totaled \$600

## ARPA:

- \$195,000 received
- 400 customers assisted
- Avg. financial relief/customer totaled \$488

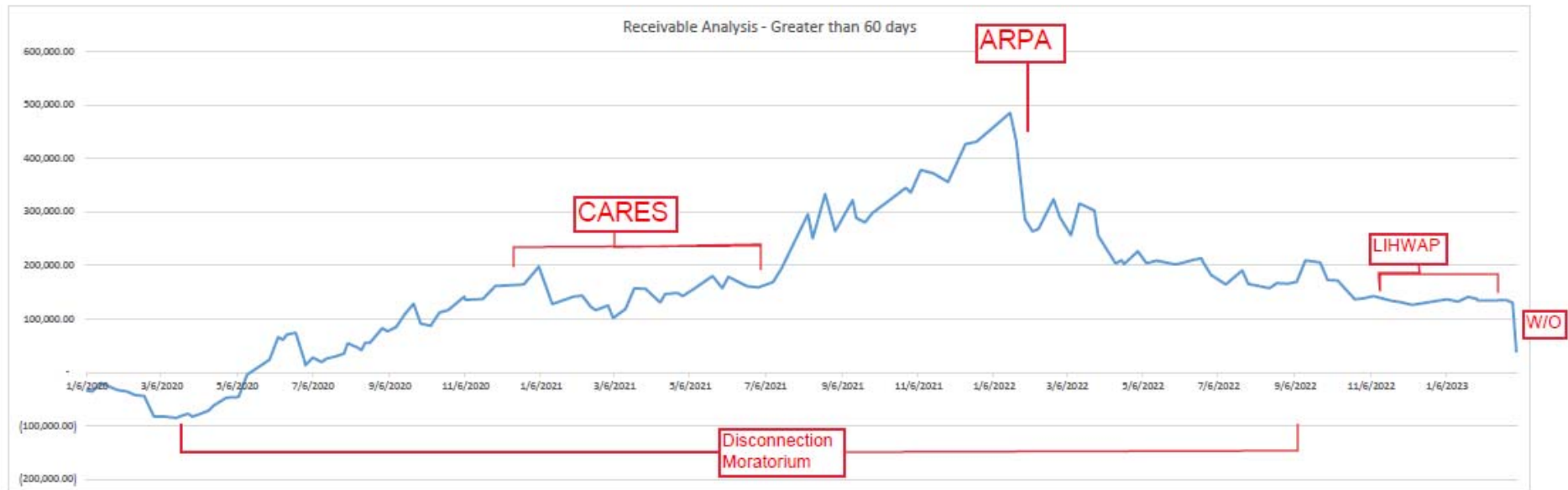
## LIHWAP

- \$30,000 received
- 54 customers assisted
- Avg. financial relief/customer totaled \$556



## Collection/Grant Application Efforts

- Customer outreach related to grant programs
  - Substantial time and effort to notify customers of funds available for CARES/LIHWAP
  - Calculation to allocate ARPA funds to qualifying accounts and subsequent customer notification once applied
- Establishment of payment plans
  - Outreach by the customer service team to all customers with past due accounts to initiate payment plans if full balance due wasn't able to be paid.
  - Monthly tracking of payments made by customers on payment plans
    - 121 payment plans established, 32 paid-in-full
- Re-establishment and communication related to disconnection for non-payment
  - Customer's receive "Final Notice"
  - Contact by phone/email by ACSA Customer Service Group
- The Customer Service Team worked closely with our customers to ensure that they were compassionately served while collecting for services rendered. Thank you Janet, Brandy, Jami, Cathy, Liz, and Terri.



## Arrearage Overview January 1, 2020 – March 3, 2023

## In Summary

Support from Federal/State grant programs and considerable effort by Authority staff, pandemic related collection was successful

Customer assistance was a priority throughout and personalized financial programs were designed to help those in need maintain water service

Resumption of the Authority's disconnection for non-payment will limit Authority exposure to uncollected accounts going forward