

BOARD OF DIRECTORS' MEETING

January 19th, 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; call in and leave a message prior to the meeting at (434) 977-4511, or email the Board prior to the meeting at board@serviceauthority.org.

9:00 a.m.	1. Call to Order and Establish a Quorum –Statement of the Board Chair
9:05 a.m.	2. Election of Officers – Board Organizational Meeting
9:15 a.m.	3. Recognitions –Jim Bowling – ACSA Attorney Service Recognition/ William Roach & Roland Bega- 2022 VRWA Expo
9:30 a.m.	4. Approve Minutes of December 15, 2022
9:35 a.m.	5. Matters from the Public
9:45 a.m.	6. Response to Public Comment
9:50 a.m.	7. 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 2022
	g. Advanced Metering Infrastructure (AMI) Project Update
	h. VERIP Application
	i. Annual Water Conservation Report
10:00 a.m.	8. Operational Presentation- Lead and Copper Regulations and Inventory
10:25 a.m.	9. ACSA 2022 Annual Report – Power Point Presentation
10:40 a.m.	10. Strategic Plan 2022-2022 Final Update Report
11:00 a.m.	11. Imagine a Day Without Water Art Contest
11:10 a.m.	12. Items Not on the Agenda
	13. Adjourn



ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF CHAIR TO OPEN JANUARY 19TH , 2022 MEETING

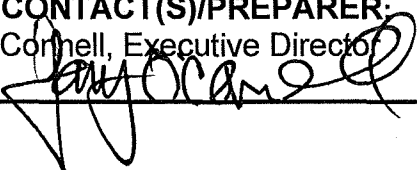
This meeting today is being held pursuant to and in compliance with Va. Code Section 2.2-3708.3.

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

3

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Election of Officers- Annual Meeting	AGENDA DATE: January 19, 2023
STAFF CONTACT(S)/PREPARER: Gary O'Connell, Executive Director 	ACTION: <input checked="" type="checkbox"/>
	ATTACHMENTS: Yes

BACKGROUND: Each year in January, at the Annual Meeting, the Board elects officers; a Chair, Vice-Chair, and Secretary-Treasurer. The Executive Director has traditionally served as the Secretary-Treasurer. See attached suggested process for the Election of Officers.

BOARD ACTION REQUESTED: Election of Officers

ATTACHMENTS: By-Laws – Albemarle County Service Authority

Election of Officers at ACSA Annual Meeting

(January each year – 1 year terms)

- Executive Director calls the meeting to order and establishes (notes) a quorum;
- Executive Director opens the floor for nominations for the Office of Chair;
 - Nominations are made;
 - Ask for any other nominations; close the floor for nominations;
 - Ask for a vote for those in favor of _____, or roll-call vote, if more than one nomination;
- Executive Director turns over Chair to the newly elected Chair who handles the nomination of Vice-Chair and Secretary-Treasurer. The Executive Director has traditionally served as the Secretary-Treasurer for the Board.

BY-LAWS

ALBEMARLE COUNTY SERVICE AUTHORITY

ARTICLE I - PREAMBLE

- 1-1. This authority was created on April 16, 1964, by action of the Board of Supervisors of the County of Albemarle, under provisions of Virginia Water and Sewer Authorities Act, Section 15.1-1239 through 15.1-1270, Code of Virginia, 1950, as amended.
- 1-2. The official title of this authority is designated by the aforesaid Board of Supervisors is: "Albemarle County Service Authority".
- 1-3. These bylaws or rules for the transaction of the business of this authority are made pursuant to authority vested in this authority under Section 15.1-1250(b) of the Code of Virginia of 1950 as amended and in accordance with the general provisions of the laws of the Commonwealth of Virginia governing water and sewer authorities as set forth in said 1950 Code in Chapter 28, Title 9, Virginia Water and Sewer Authorities Act.

ARTICLE II - MEMBERS

- 2-1. This authority shall consist of six members, said members to be appointed by the Board of Supervisors pursuant to Section 2-702 of the Albemarle County Code.
- 2-2. All members of this authority are appointed by the Albemarle County Board of Supervisors for terms of four (4) years.
- 2-3. The authority may provide for the payment of expenses of this authority and a reasonable compensation for members of the authority who are not county employees.
- 2-4. Any vacancy in membership will be filled by appointment of the County Board of Supervisors and such appointments will be for the unexpired term only.
- 2-5. Any appointed member may be removed by the Albemarle County Board of Supervisors for inefficiency, neglect of duty, or malfeasance or misfeasance in office.

ARTICLE III - OFFICERS AND THEIR SELECTION

- 3-1. The officers of the Service Authority shall consist of a Chair, a Vice-Chair, a Secretary-Treasurer and an Executive Director. The Secretary-Treasurer and the Executive Director need not be members of the authority.
- 3-2. Nomination of officers shall be made from the floor at the annual meeting held in January of each year. The elections shall take place at the same meeting.
- 3-3. A candidate receiving a majority vote of the entire membership of the Service Authority shall be declared elected. The elected member shall take office immediately and serve for one (1) year, or until a successor takes office.
- 3-4. Vacancies shall be filled by regular election procedures at the next regular meeting.

ARTICLE IV - DUTIES OF OFFICERS

- 4-1. The duties of the Chair are:
 - a. To preside at all meetings.
 - b. To appoint all committees, with the exception of the Executive Committee.
 - c. To rule on procedural questions (subject to a reversal by a 2/3 vote of members present).
 - d. To carry out other duties as assigned by the authority.
- 4-2. The duties of the Vice-Chair are:
 - a. To act in the absence of the Chair.
- 4-3. The duties of the secretary-treasurer are:
 - a. To keep a written record of all business transacted by the authority.
 - b. To notify members of the meetings.
 - c. To keep all official records and reports of the authority.
 - d. To certify all records, and reports of the authority.
 - e. To attend to the correspondence of the authority.
 - f. To keep a record of the minutes of meetings.

ARTICLE V - COMMITTEES

- 5-1. Special Committees: The Chair may appoint such special committees as deemed necessary.

ARTICLE VI - MEETINGS

- 6-1. Regular meetings of the authority shall be held monthly on the third Thursday of the month at 9:00 a.m.
- 6-2. Special meetings shall be called at the request of the Chair or at the request of a majority of the membership. Written notice of meetings shall be given to each member at least two (2) days prior to such meetings.
- 6-3. All regular meetings, records, and accounts shall be open to the public.
- 6-4. A majority (4 of 6) of the membership of the authority shall constitute a quorum. In any meeting where there is otherwise a quorum and any member declares a potential conflict of interest on any matter of business the remaining eligible members shall constitute a quorum for the transaction of that business matter. Approval of any business matter shall require a majority vote of eligible non-abstaining members. Voting may be by roll call, in which case a record shall be kept as part of the minutes.
- 6-5. If a quorum is physically present to conduct a meeting of the Authority's Board of Directors or one of its committees, other members may attend and participate in such meeting from a remote location by telephone or other audio or video means, provided such attendance complies with the provisions of the Virginia Freedom of Information Act, as amended from time to time. A member wishing to attend in this manner shall advise the clerk of the board a reasonable time before start of the meeting, so that the necessary equipment can be put in place.

ARTICLE VII - ORDER OF BUSINESS

- 7-1. The order of business of a regular meeting shall be:
- a. Call to order by the Chair.
 - b. Determination of a quorum.
 - c. Approval of minutes of regular meeting and of executive committee meetings.
 - d. Matters from the public.
 - e. Consent Agenda.
 - f. Matters of business and discussion.
 - g. Matters not listed on the agenda.
 - h. Adjournment.
- 7-2. Parliamentary procedure in authority meetings shall be governed by the adopted rules of order, namely Robert's Rules of Order.

ARTICLE VIII - AMENDMENTS

- 8-1. These rules, excepting Articles I and II, may change by a two-thirds vote of the entire authority after ten days notice has been given them of the projected change.

BY-LAWS ADOPTED:	January 17, 1966
AMENDED:	March 9, 1967
	March 9, 1978
	April 17, 1986
	December 18, 1997
	December 16, 1999
	December 17, 2009
	July 17, 2014
	February 18, 2016
	March 17, 2016
	November 19, 2020

R E S O L U T I O N

WHEREAS James M. Bowling has concluded his service as legal counsel for the Albemarle County Service Authority; and

WHEREAS Mr. Bowling has served the Albemarle County Service Authority for a total of

50 Y E A R S; and

WHEREAS during his tenure, Mr. Bowling has provided invaluable insight, perspective, and guidance to not only the ACSA Board of Directors' but to the staff as well; and

WHEREAS his historical knowledge and legal expertise have helped the ACSA fulfill its vision and mission for half a century; and

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

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the Albemarle County Service Authority expresses its sincere gratitude to James M. Bowling for his service to the Board, staff, and customers of Albemarle County Service Authority.

I hereby certify the foregoing to be a true and exact copy of a resolution adopted by the Board of Directors of the Albemarle County Service Authority in a regularly scheduled meeting held January 19, 2023 by a vote of __ to __.

Gary B. O'Connell, Secretary-Treasurer

StreamLine

A man in a blue shirt and yellow hard hat is working on a blue cylindrical device mounted on a wooden block. He is using a tool to adjust a hose connected to the device. In the background, other people are visible, some wearing hard hats and safety gear.

2022 VRWA EXPO HIGHLIGHTS

INSIDE:

- OUT OF SIGHT, OUT OF MIND • A LONG WAY TO GO STILL • PERACETIC ACID – AN ALTERNATE DISINFECTANT
- AS IF PFAS, PFOS WEREN'T ENOUGH – HERE COMES MICROPLASTICS • RAIN DESCENDS FROM PURGATORY MOUNTAIN
- THE WORKING GENIUS MODEL • AMASS SOME CASH • GOOD NEIGHBORS

2022 VRWA EXPO

HIGHLIGHTS

WHO DOESN'T LOVE a cool, crisp fall day? And such were the days enjoyed by members during VRWA's 2022 Expo at Augusta Expo Event Center in Fishersville, Virginia, as they took part in classes and team-building activities. The event featured some of our old, as well as new, favorites, such as cornhole, horseshoes, meter madness, hydrant hustle and bingo.

New this year was a session titled "Notes from the Field," which we hope to feature annually so that operators from around Virginia can have a chance to share their experience and knowledge with one another. We heard from William Roach, of Albemarle County; Roland Bega, of Albemarle County; and Jason Roberts, of the Town of Woodstock, about their respective hydrant-maintenance and -flushing programs and valve-exercising programs. Each locality had different experiences due to their differing sizes and resources, but each offered some great ideas for ways to handle the same situations.

Some of the other great classes included information about asphalt repair, presented by Perma Patch; CDL training, presented by the Virginia State Police; pump contingency plans, presented by Xylem; asbestos pipe, presented by Albemarle County; and plant safety, presented by Dave Burpeau.

Meanwhile, this year's tapping contest featured a tight competition as each team came prepared to win. Roland Bega

and William Roach, both of Albemarle County, have long been the team to beat. We knew coming in, however, that the Bedford Boys didn't want to take second place to them again. The City of Waynesboro, the 2019 champions, was also in attendance this year, adding to the pressure. Despite this stiff competition, Bega and Roach were once again able to pull off the win, with a time of 2 minutes and 4 seconds.

Continuing tradition, Southern Corrosion once again sponsored a kayak giveaway. This year's winner was Ray Rogers, of the Town of Front Royal – Congratulations, Ray!

As always, VRWA would like to express gratitude for its vendors and sponsors, particularly Diamond sponsor Southern Corrosion as well as Tencarva and Pall-Water Membranes Systems, both of which were Gold sponsors. In addition, Core & Main's sponsorship of the tapping contest and Wednesday BBQ made our Expo fantastic. Thank you to all those who supported this fantastic event! 🍷



Clay Shoot – Highest Overall Score (left to right): Mark Estes, Tom Delbridge, Mark Inboden and Matt Longshore, of Team No. 2.



Highest Overall Score: Greg Everhart, left, pictured with Executive Director Mike Ritchie.

1 The Board of Directors of the Albemarle County Service Authority
2 (ACSA) met in a regular session on December 15, 2022, 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; Mr. Nathan Moore; Dr. Lizbeth
6 Palmer (joined remotely from home); Mr. John Parcels; Mr. Clarence
7 Roberts, Chair; Mr. Charles Tolbert, Vice-Chair.

8 **Members Absent:** None.

9 **Staff Present:** Jim Bowling, Tim Brown, Brendan Ganz, Jeremy Lynn,
10 Michael Lynn, Quin Lunsford, Angel Monterrozo, Alex Morrison, Gary
11 O'Connell, Emily Roach, Danielle Trent, April Walker, Justin Weiler.

12 **Staff Absent:** None.

13 **Public Present:** Mike Derdeyn, Flora Pettit PC; Neil Williamson, Free
14 Enterprise Forum (virtual); Scott Fleming, PFM Asset Management; Leslie
15 Weaber, PFM Asset Management.

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

18 Mr. Roberts called the meeting to order, and a quorum was
19 established. He then read the opening Board Chair statement (Attached as
20 Page ____). For the record, Dr. Lizbeth Palmer joined the meeting
21 virtually.

22
23 2. Recognitions – Service Recognition/Retirement – Calvin
24 Underwood, Operations Supervisor

25 Mike Lynn, Director of Operations, came forward to say a few
26 words about Calvin Underwood. He stated that Calvin began his career
27 with the ACSA on October 4, 1976 at 20 years old, when he still had dark
28 hair. He stated that Calvin was promoted two years later, from a Utility
29 Worker to an Equipment Operator. He mentioned that in 1980, Calvin
30 became a Hydrant and Valve Mechanic, followed by a Crew Leader in
31 1985, and finally Operations Supervisor in 1996.

1 Mr. Lynn stated that the first few winters Mr. Underwood worked at
2 the ACSA separate the men from the boys. He stated that the maintenance
3 department then had about 10 employees that worked 12-hour shifts in the
4 freezing cold. Mr. Lynn stated that Calvin is an employee that can be
5 counted on to get the job done. He mentioned that Calvin has shown
6 himself to be a man of integrity and honesty, who always holds himself
7 accountable and did not make excuses.

8 Mr. Lynn stated that Calvin has made a difference for the
9 betterment of the ACSA. He stated that he would like to thank Mr.
10 Underwood for his commitment, dedication, and sacrifice over the course
11 of his career. He added that he would also like to thank Mr. Underwood's
12 wife Dawn, for her patience in dealing with the challenges of Calvin's job as
13 well. He noted that only the spouses and children understand what a
14 dedicated employee working for a utility goes through, which he can attest
15 to as well. He added that his last request of Calvin would be, in retirement,
16 to sleep in, fish as often as he can, and live well.

17 Mr. O'Connell stated that the first he knew or heard of Calvin
18 Underwood was from the City utilities staff. He stated that they knew him
19 as the "go-to" person for the ACSA in terms of system knowledge. He
20 stated that Calvin has been a valuable asset, employee, and supervisor at
21 the ACSA. He congratulated Calvin on his 46 years of service.

22
23 3. Approve Minutes of November 17, 2022

24 Mr. Parcels stated that he had a couple of corrections. He stated
25 that the first correction is on page 14, line 30. He stated that the word
26 "pain" should be "paint." He stated that the second correction is on page
27 15, line 12. He stated that the word "difficult" should be "difficulty." He noted
28 that he thinks on the same page, line 16, the comma after "meter" should
29 be removed and the word "where" added after "and."

30 ***Mr. Armstrong moved to approve the minutes as amended,***
31 ***seconded by Mr. Tolbert. All members voted aye.***

4. Matters from the Public

There were no matters from the public.

5. Response to Public Comment

There was no response to public comment.

6. Consent Agenda

a. Monthly Financial Reports – Mr. Parcels stated that on page 29, the first page of the consent agenda, water and wastewater revenues for FY 2023 are shown to be above budgeted expectations by 3.7%, and 4% lower than budgeted expectations on the trend analysis chart. He asked if this was a concern. Mr. Lunsford replied that whether the ACSA exceeds or does not make budget is dependent upon the weather. He stated that last year, the weather was reasonably dry, and consumption was high. He noted that this was not the case this summer.

b. Monthly CIP – Mr. Parcels stated that the Ragged Mountain Water Main Replacement design was dependent upon the Morey Creek Bridge Replacement project, which is no longer active. He asked what this means for the Ragged Mountain project. Jeremy Lynn, Director of Engineering, replied that the ACSA has been looking at other options to install the water main, none of which are very cost effective. He stated that the goal is to get the Morey Creek project back on the radar in early 2023 and find a different funding source to make it happen. Mr. Parcels asked if the ACSA can still proceed with the Ragged Mountain project if the Morey Creek project does not happen. Mr. Lynn replied that there are other options, but they are not cheap.

c. CIP Project Close-Outs

d. Monthly Maintenance Update –

e. Rivanna Water and Sewer Authority (RWSA) Update – Mr. Parcels stated that easement negotiations like the ones with the UVA

1 Foundation for the Ragged Mountain water line projects on pages 95
2 and 98 are slow. He asked if this affects design or the timeline in terms
3 of the design. Mr. Lynn replied that it certainly does. He stated that
4 when there are projects ready for construction, they can be delayed if
5 the necessary easements have not been obtained. He noted that the
6 ACSA was able to successfully its easement for their Ragged Mountain
7 water main project, and RWSA is currently working on their easements
8 for their raw water line project. Mr. O'Connell added that RWSA just
9 received a signature a couple of days ago from the final private
10 property owner for that project. He added that they have one more
11 negotiation to complete with UVA.

12 Mr. Parcels stated that he was a bit confused about the difference
13 between the ACSA's easement negotiations and RWSA's. Mr.
14 O'Connell replied that it is project dependent. Mr. Lynn stated that the
15 ACSA's easement was much smaller than the easement RWSA is
16 pursuing, and it was located in an area that had limited growth
17 potential. He mentioned that he is not sure of the development
18 potential in the area of the easement RWSA is looking to obtain. He
19 added that these factors would affect the negotiations and the cost. Mr.
20 O'Connell added that typically, the ACSA's goal is to have all of the
21 easements in place before bidding a project, and RWSA is the same.

22 ***f. ACSA Board Policy Future Issues Agenda 2022 –***

23 ***g. Advanced Metering Infrastructure (AMI) Project Update –***

24 ***h. Holiday Schedule for 2023 –***

25 ***i. ACSA Board Meeting Schedule for 2023 –***

26 ***Mr. Parcels moved to approve the consent agenda, seconded by***
27 ***Mr. Tolbert. The Chair asked for a roll-call vote: Mr. Parcels, aye;***
28 ***Mr. Tolbert, aye; Mr. Roberts, aye; Mr. Armstrong, aye; Mr. Moore,***
29 ***aye.***
30
31

1 7. Annual Investment Report

2 Scott Fleming, Director with PFM Asset Management, came
3 forward to present the first half of the ACSA's Market & Portfolio Update
4 (Attached as Pages _____). He stated that he would give a brief update
5 with respect to the economy and the market.

6 Mr. Fleming stated that one of the current market themes, which is
7 stating the obvious, is high inflation. He stated that some would say the
8 Federal Reserve waited a bit too long to take action to combat inflation
9 and, as a result, have had to be very heavy-handed. He mentioned that
10 rates have risen to historic highs creating a lot of volatility in the market. He
11 noted that the values of securities have been affected by this. He
12 mentioned that the hope is that the Federal Reserve can get to a level that
13 makes sense to bring inflation down to their target. He added that the
14 Federal Reserve has two mandates, which are maximum employment and
15 price stability.

16 Mr. Fleming stated that the next slide illustrates various projections that
17 show weaker economic growth and an extended timeline for tighter
18 monetary policy. He noted the chart in the upper left-hand corner of the
19 slide, which showed projections for the Gross Domestic Product (GDP). He
20 noted that it is projected to grow just 0.5% from 2023 to 2024.

21 Mr. Fleming moved to the next slide which shows estimates of where
22 rates should be, put forth by members of the rate setting committee. He
23 stated that the following slide outlines the monetary policy. He noted the
24 graph on the right-hand side, which shows a staircase approach to raising
25 rates from 2015-2018. He stated that in 2021, the graph shows a vertical
26 increase in rates. He stated that the last half of 2021 and the first few
27 months of 2022 is when the Federal Reserve should have begun raising
28 rates. He mentioned that if they did, there would have been more of a
29 gradual increase, but they did not, so now they are playing catch up to
30 bring inflation down.

1 Mr. Fleming moved to the slide illustrating the unemployment rate. He
2 mentioned that the U.S. economy added 263,000 jobs last month, and the
3 unemployment rate remained at 3.7%. He stated that the Federal Reserve
4 actually wants to see a higher unemployment rate because of demand
5 destruction. He stated that more people out of work will bring the demand
6 down, which will stabilize prices. He noted that the problem with this is the
7 labor force participation rate decreasing. He stated that less people looking
8 for the same amount of jobs cause wage inflation.

9 Mr. Fleming stated that the last thing he wanted to mention was the
10 U.S. Treasury curve. He stated that this is a plot of different yields with a
11 maturity of 3 months to 30 years. He stated that this graph provides an
12 indication of the investment sector. He mentioned that if there is a curve
13 going upward, that means the economy is likely going to improve. He noted
14 that an inverted curve, like the one in this graph, indicates that investors
15 believe there is the likelihood of a recession on the rise.

16 Leslie Weaber, Senior Managing Consultant, came forward to give the
17 Board an update on the ACSA's portfolio. She stated that when the ACSA
18 first invested its core funds, there was a very low interest rate environment.
19 She mentioned that in March 2022, the ACSA adopted a new investment
20 policy, which allowed PFM to include credit sector securities in the ACSA's
21 portfolio. She noted that they have provided a lot of value in today's
22 environment.

23 Ms. Weaber moved to the next slide, which provided a snapshot look at
24 the ACSA's portfolio. She stated that the portfolio market value is about
25 \$29 million, and the duration is about 1.25 years. She noted that most
26 securities will mature in about 6-12 months. She mentioned that the various
27 sectors in the portfolio are very high in credit quality. She noted that the
28 takeaway from this slide is that the portfolio is more diverse across high-
29 quality sectors.

30 Ms. Weaber stated that the next slide outlined the ACSA's portfolio
31 performance. She mentioned that there is an inverse relationship between

1 the dramatic increase in interest rates and market value. She stated that
2 the rates shot up so quickly, it had a negative effect market value. She
3 stated that moving forward, as the Federal Reserve gets inflation in check
4 and stabilizing pricing, the ACSA may start to see a higher market value.
5 She stated that the important thing to look at is total return, which considers
6 interest earned, unrealized gains and losses, as well as market value
7 fluctuation. She noted that inflation caused negative performance for the
8 quarter. She stated that as older securities are turning out and being sold,
9 the interest earned will be higher and will hopefully offset any market
10 volatility. She added that the portfolio was still able to outperform the
11 benchmark, which is a testament to the ACSA's Investment Policy and
12 allowing other security types in the portfolio. She stated that the next slide
13 shows the accrual basis earnings. She noted that the total earnings for the
14 quarter was about \$76,000 and almost \$280,000 since inception.

15 Ms. Weaber stated that PFM recommends that the ACSA stay the
16 course with its 0–3-year strategy. She stated that PFM will keep in touch
17 and make recommendations every quarter as the market changes. She
18 stated that they can then shorten or lengthen the portfolio if necessary.

19 Mr. Parcels asked if there is any advantage to increasing the
20 investment amount to take advantage of the interest rate. Ms. Weaber
21 replied yes because currently, the ACSA would be purchasing at a much
22 higher yield. Mr. Parcels asked if the ACSA had other types of money. Mr.
23 Lunsford replied that the second component of the ACSA's portfolio is
24 \$13.5 million in the Local Government Investment Pool (LGIP), which is
25 very liquid, much like cash. He mentioned that the ACSA is seeing
26 improved returns from the LGIP compared to the two last years. He noted
27 that today, it is outperforming this portfolio.

28
29 8. Operational Presentation – 4-Story Backflow Prevention Program

30 Alex Morrison, Senior Civil Engineer, came forward to present a
31 Power Point presentation to the Board (Attached as Pages _____). He

1 stated that he would begin with some background on what backflow is,
2 followed by the ACSA's Backflow Prevention Program and how it ties into
3 the creation of the 4-Story Backflow Prevention Assembly Retrofit Project.
4 He mentioned that he would also touch on the status of the project and
5 some of the delays.

6 Mr. Morrison stated that backflow is the undesirable reversal of flow
7 of a liquid, gas, or suspended solid into the potable water supply due to
8 back siphonage or back pressure. He stated a backflow prevention
9 assembly is used to protect potable water supplies from contamination or
10 pollution due to backflow. He mentioned that there two types of assemblies
11 generally seen in the ACSA system – a Double Check assembly (DC) for
12 low hazard and a Reduced Pressure Zone assembly (RPZ) for high
13 hazard. He noted that both of these assemblies have two check valves, but
14 the RPZ assembly will actually dump water to prevent backflow. He stated
15 that because of this, RPZ assemblies have to be installed above ground
16 with proper drainage. He noted that RPZs are usually seen on domestic
17 services for non-residential buildings. He added that DC assemblies are
18 seen on the residential side or fire suppression systems.

19 Mr. Morrison stated that the next few slides outline the State
20 regulations and Virginia code regarding backflow prevention. He stated that
21 there are a couple different sections within the Virginia code that helped to
22 create the ACSA's Backflow Prevention Program. He stated that Section
23 610 is where the requirement for backflow prevention assemblies for four-
24 story residential structures comes from. He stated that the State
25 regulations are what created the Cross-Connection and Backflow
26 Prevention Program at the ACSA, which is outlined in Section 8 of the
27 ACSA's Rules and Regulations. He mentioned that the program is enforced
28 by the Environmental Group within the Engineering department, which is
29 made up of Tim Brown, Environmental Compliance Specialist, Eric Nutter,
30 Regulatory Compliance Specialist, and Angel Monterrozo, Engineering
31 Technician I. He mentioned that these three employees track 4,126

1 backflow prevention assemblies within the system. He noted that of those,
2 a little over 2,900 are RPZ assemblies and just over 1,200 are DC
3 assemblies. He stated that the following slide shows a pamphlet the
4 Environmental Group created for educational purposes.

5 Mr. Morrison moved to the next slide, outlining the background and
6 development of the Four-Story Residential Backflow Prevention Assembly
7 Retrofit Project. He stated that in 2018, the ACSA identified structures that
8 had been built with a fourth story that had water service. He stated that
9 historically, these would be identified during the building permit review
10 because the application specifically asks how many stories the structure
11 has. He noted, however, that the Virginia Building Code changed the
12 definition of a fourth story in 2011, instead calling it a habitable area. He
13 mentioned that this is how those fourth story structures made it through the
14 permit review without being identified.

15 Mr. Morrison stated that the ACSA staff had some meetings with
16 the Virginia Department of Health (VDH) to determine where the backflow
17 assemblies would be required, as some of the structures do not have
18 plumbing on the fourth story. He stated that it was determined that the
19 backflow assemblies only needed to be installed in those structures that
20 have plumbing on that fourth story, or habitable area. He stated that the
21 ACSA then identified the builders that constructed the four-story structures
22 and through meetings with these builders, determined that there were 87
23 structures that were built and were not required to have a backflow device.
24 He noted that this number later went down to 81, as 6 of them did not have
25 plumbing on the fourth story.

26 Mr. Morrison stated that the ACSA put together the project and
27 went before the Board of Directors to request funding, which was granted.
28 He stated that the funds were for installation, inspection, and initial testing
29 of the backflow prevention assemblies. He stated that the staff then rolled
30 out the customer contact and started working on data acquisition to
31 determine things like where the customer wanted the assembly installed,

1 impacts on drywall and landscaping, and if the structures already had an
2 expansion tank. He noted that the ACSA contracted with Dewberry, one of
3 its term contract engineers, to create bid documents.

4 Mr. Morrison stated that when the staff began customer data
5 collection, there were quite a few delays in that process, the first being
6 COVID. He stated that the pandemic began before the first customer letter
7 went out requesting information. He mentioned that initially, the staff
8 planned on making site visits and working one on one with the customers.
9 He noted that this got delayed due to social distancing, thus the staff had to
10 try and meet with customers via phone. He stated that there was also a lot
11 of change in ownership for these structures, as interest rates were low, and
12 people were buying and selling a lot. He mentioned that this has slowed
13 down due to the increase in rates. He stated that there were some property
14 owners that were just unresponsive, and it was difficult to get in touch with
15 them. He stated that there were also some owners that were difficult to
16 reach because they live out of the state or country. He noted that this
17 project was put out to bid in the summer of 2022, but there were no bids
18 received. He added that the staff did follow up with some interested
19 contractors, who advised that their workload was too heavy to take on the
20 project.

21 Mr. Morrison stated that because of the reasons he just listed, the
22 project was restructured and split into three phases based on geographic
23 location. He stated that Phase 1 is the Out of Bounds subdivision which
24 includes 24 structures, Phase 2 is the Cascadia subdivision with 29
25 structures, and Phase 3 is the Avinity, Hollymead, Lochlyn Hill, and Old
26 Trail subdivisions that includes 28 structures. He stated that the ACSA
27 developed a request for proposals (RFP) for each phase in lieu of the
28 sealed bidding, which is a quicker process. He noted that the RFP for
29 Phase 1 is underway, and the proposals are due on December 21st at 2pm.
30 He stated that the staff anticipates awarding this project before the end of
31 the year and beginning construction by the middle of January.

1 Mr. Morrison stated that one of the change the staff made is both of
2 the ACSA's DPOR certified staff members, Angel Monterrozo and Eric
3 Nutter, will be completing the County backflow inspections on behalf of the
4 County of Albemarle, as third-party inspectors. He noted that this way, the
5 ACSA can conduct the inspection on the backflow device at the same time
6 it is installed, as opposed to requiring access to each structure for a second
7 day. Mr. Parcels stated that it was nice of the County to allow the ACSA to
8 do so. Mr. Morrison replied that it is a good set-up to have, as it is a more
9 linear approach.

10 Mr. Morrison stated that the ACSA has since made a few changes
11 to its review process that will help prevent missing required backflow
12 protection on structures with fourth story plumbing. He stated that the first
13 change is in the initial plan review. He stated that if the staff comes across
14 one of these structures, notes are being added to the site plan itself to
15 make everyone aware of the requirement. He stated that with the building
16 permit process, the staff is ensuring to look closely to identify any structure
17 that has a habitable area that is not considered a fourth floor. He noted that
18 currently, the building permit form that comes to the ACSA asks for the
19 number of floors, including a fourth story habitable area. He added that in
20 terms of active construction, before the meter installation, the ACSA's
21 inspectors are keeping an eye out in the field for any of these structures
22 and ensuring that a backflow device is required and installed.

23 Mr. Tolbert stated that it seems the State has two different
24 definitions for a fourth story. He stated they refer to it s a fourth floor and a
25 habitable area. He stated that they should choose one or the other, as
26 opposed to it being referred to as both. Mr. Morrison replied that it can be
27 confusing. He stated that what it comes down to is the height of the water
28 column above the water meter. He stated that when the structure reaches
29 four floors, the head pressure gets close to what is in the system at
30 minimum pressure. He noted that if a structure had fourth story plumbing,
31 but the main floor was below the water meter, the backflow device would

1 not be required because the fourth story would only technically be three
2 floors above the meter. He agreed, however, that the disconnect between
3 the Water Works regulations and the State code can be confusing.

4 Mr. Tolbert asked if the customers are agreeable to this project. Mr.
5 Morrison replied that the staff has not come across any customer that was
6 opposed to the project. He stated that as soon as they realize that the
7 ACSA is funding the installation, inspection, and initial testing of the device,
8 they are agreeable to it. He mentioned that most of the conversation has
9 been around educating the customer on the reason for the project. Mr.
10 Parcels asked, in that same vein, how the annual testing requirement is
11 being handled. He asked if the customers signed something
12 acknowledging that they will be responsible. Mr. Morrison replied that they
13 are aware of their responsibility to fulfill the annual testing requirement. He
14 stated that the ACSA also has a list of DPOR certified backflow tester that
15 the ACSA has worked with.

16
17 9. Budget Guidelines and Schedule for FY '24 Budget/Rates

18 Mr. Lunsford stated that he had a short Power Point presentation
19 (Attached as Pages _____) to review the preliminary budget guidelines
20 and schedule for FY 2024, and budgetary information, including RWSA
21 charges for water and wastewater treatment.

22 Mr. Lunsford stated that the schedule is pretty much the same as
23 years past, with the proposed CIP being presented to the Board in March,
24 along with the scheduling of the CIP public hearing. He stated that in April,
25 the preliminary rate schedule and proposed FY 2024 budget will be
26 presented. He mentioned that the public hearing for the budget and rates
27 will be scheduled at the April Board meeting as well. He noted that an in-
28 depth budget and rates workshop will take place in May, followed by the
29 public hearing on the budget and rates in June, as well as a request for
30 adoption of the budget and rates by the Board.

1 Mr. Lunsford stated that typically during this time of year, the staff
2 updates the rate model. He stated that they will be using the budgeting
3 module within the ACSA's newly deployed financial system. He noted that
4 customers will receive a budget and rates newsletter in May.

5 Mr. Lunsford stated that RWSA projections show larger than
6 expected increases in the cost of water and wastewater treatment to the
7 ACSA. He stated that there have been significant increases in RWSA's CIP
8 program on projects that have either already started or will be starting. He
9 stated that the overall increase is about \$140 million, with \$77 million of
10 that due to inflation, supply chain issues, and increased borrowing costs.
11 He mentioned that the other large component of the increase, \$54 million,
12 is due to the acceleration of some projects.

13 Mr. Parcels asked why RWSA wants to accelerate projects at the
14 cost of \$54 million. Mr. Lunsford replied that from what he can gather,
15 RWSA feels the need for redundancy in the system outweighs the financial
16 impact at this time. Mr. O'Connell stated that the two main projects being
17 accelerated are the South Rivanna Reservoir (SRR)- Ragged Mountain
18 Reservoir (RMR) Waterline Project and additional GAC filters at the water
19 treatment plants. He stated that these discussions are just beginning, but
20 he thought it was important for the Board to get an idea of where things
21 were.

22 Mr. Lunsford stated that the next slide shows the projected increase
23 in costs to ACSA from RWSA, over the next five years. He noted the
24 double-digit percentage increases year over year, with an over 13%
25 increase next fiscal year. He stated that the increases will be funded
26 through water and sewer fees, but also through connection fees. He
27 mentioned that those components of RWSA's CIP that are growth related
28 can be funded through connection fees, so all of the burden will not be on
29 water and sewer customers. He noted that the staff will very carefully
30 evaluate this over the next few months and transparently present its
31 findings to the Board.

1 Mr. Lunsford stated that the ACSA has about \$16 million in
2 reserves that is to be specifically allocated to RWSA growth-related
3 projects. He stated that the ACSA uses system development funds to pay
4 for any RWSA project that increases capacity in the system. He mentioned
5 that the ACSA has about \$16 million in ACSA capacity charges and those
6 funds are used similarly, but only for ACSA CIP projects that increase
7 capacity for growth. He noted that non-growth-related ACSA CIP projects
8 are paid through water and sewer rates. He added that there is \$12 million
9 in operating reserves to help smooth rate increases.

10 Mr. Lunsford moved to the next two slides which illustrated
11 increases in cost estimates in FY 23-27 RWSA projections and the FY 24-
12 28 projections. He stated that the intent of the slides is to show some of the
13 unpredictability in the budget process. He mentioned that it is helpful to
14 receive projections from RWSA given that it is such a big portion of the
15 ACSA's budget, but that those numbers can change any given year. He
16 noted that reserves will be critical to help mitigate the increases each year
17 from RWSA.

18 Mr. Lunsford stated that the ACSA wanted the Board to have some
19 preliminary information at the onset of the budget process, but there is still
20 much work to be done. He stated that the ACSA's operating budget will
21 have an impact on what will ultimately be presented to the Board. He noted
22 that the next slide shows roughly what the monthly impact will be on a
23 single-family residential customer at various consumption levels. He added
24 that these projections reflect a 10% increase across the board for water
25 and sewer rates.

26 Mr. Lunsford stated that in terms of next steps, the ACSA staff will
27 be meeting with RWSA to better understand the needs of both
28 organizations. He stated that the ACSA is fully committed to analyzing
29 different options for Board consideration and will be seeking guidance from
30 the Board throughout the process. He noted that it will be difficult, but that
31 the increases are not unexpected. He added that some of the cost is

1 inevitable, but that the ACSA should be able to offset some of it through the
2 strategic use of reserves.

3 Mr. Parcels stated that the in terms of connection charges, the
4 ACSA seems to be right in the middle compared to other areas. He asked if
5 there is ever any pushback from developers about the connection charges
6 being high. Mr. Lunsford replied that there is some pushback sometimes,
7 but it is usually from an out-of-town developer. He noted that local
8 developers, or those that have developed here before, understand the
9 charges.

10 Mr. Parcels asked if the connection fees could be set specific to an
11 area. Mr. Lunsford replied that the ACSA had a special rate district for the
12 North Fork Regional Pump Station that was set a number of years ago
13 when the 2010 bond was issued. Mr. Lunsford replied that it is possible,
14 and something the staff can evaluate in the future. Mr. O'Connell added
15 that increased connection costs are not really tied to one geographic area.
16 He stated that builders know the fees up front and usually just build them
17 into the base cost.

18 Dr. Palmer asked, through chat, if the ACSA received complaints
19 from residential customers about the rates and if so, how often. Mr.
20 Lunsford replied that there are complaints on occasion, with some of them
21 related to the tiered billing system. He stated that some customers with
22 larger households do not think that it fairly considers their situation. He
23 mentioned that they also receive complaints from irrigation customers, but
24 not often. Mr. O'Connell added that the staff will share the responses from
25 the customer survey when they present it. He stated that customers
26 probably comment more on how fast the rates grow, as opposed to the
27 amount.

28 Mr. Moore stated that essentially, over the next five years, the
29 ACSA is looking at increase of 57%. He stated that if this were passed on
30 fully to the ACSA's customers, it would take an average household monthly
31 bill from \$60 to \$100. He mentioned that he does not see where much can

1 be done about the increase from RWSA, as that is the only source of
2 water.

3 Mr. Parcels asked if the Albemarle County Board of Supervisors
4 (BOS) would tell RWSA that they are being too aggressive with their CIP
5 program. Mr. O'Connell replied that the BOS does not fund any of RWSA's
6 or the ACSA's projects and do not necessarily have a vote on either's CIP
7 programs. Mr. Parcels stated that he was speaking more from the
8 perspective of being customers. Mr. O'Connell replied that he has not
9 heard anything from a customer perspective.

10 Mr. Tolbert stated that he imagines the City has the same issue
11 with rising rates. He stated that it seems RWSA has two captive customers,
12 the ACSA and City of Charlottesville, and there is nothing either one can do
13 about the increased costs. He asked how the ACSA has any control over
14 the situation. Mr. Lunsford replied that informally, Mr. O'Connell can share
15 this conversation with the RWSA Board.

16 Mr. O'Connell stated that there are seven members on the RWSA
17 Board. He stated that three are from the City, three are from the County
18 and he is one of those three, and one Chair selected by both the County
19 and the City. He mentioned that the City is facing a similar situation,
20 although their numbers are not as great, but they have not discussed it yet.

21 Dr. Palmer stated that RWSA's Board is very much controlled by
22 the City and the ACSA. She stated that prior to 2004, infrastructure was
23 failing terribly because the City and the County were not supporting
24 investments in that infrastructure. She mentioned that now, she feels both
25 the City and the County have a better appreciation for what needs to be
26 done for the future.

27 Mr. Moore stated that he definitely supports robust infrastructure
28 that is going to last for a long time, which is the reason he enjoys being on
29 the ACSA Board. He stated that in terms of the budget philosophy and
30 smoothing out rate increases, it seems that doing so now only increases
31 the gap for the future. Mr. O'Connell replied that he felt it was important

1 that the Board understand the unlikeliness of the ACSA staff presenting a
2 budget with a 5% increase. He added that some of the RWSA projects are
3 committed and need to be done to ensure we are able to deliver water to
4 customers in a reliable way, but the cost estimates are significantly higher
5 than estimated. He noted that these are the projects where there will be a
6 change in cost. He noted that there are some choices, but whether they will
7 make much a difference remains to be seen.

8 Mr. O'Connell stated that the Water Supply Plan was originally the
9 Ragged Mountain Dam Project, which has been completed. He stated that
10 the plan also provided for several other projects. He stated that in 2018,
11 there was a debate about the timing of the Ragged Mountain Reservoir to
12 South Rivanna Reservoir Raw Water Line Project. He stated that the ACSA
13 Board at the time supported the 2027-2035 timeframe, which was a bit
14 more aggressive than some of the other schedule options. He mentioned
15 that RWSA has revised that time for completion from eight to six years. He
16 stated that the ACSA Board also took the position that the Ragged
17 Mountain Dam additional 12 feet be in place when the pipeline is finished.

18 Mr. O'Connell stated that the other project the ACSA was interested
19 in was the Observatory Water Treatment Plant Expansion Project, which is
20 under construction and should be finished within the next year. He stated
21 that this is an important project, as it will allow the treatment plant to fully
22 utilize the Ragged Mountain Reservoir. He stated that the Central Water
23 Line Project, which was called the Avon/Pantops Water Line before the
24 redesign pushed it more towards the center of the City, better connects the
25 Observatory Water Treatment Plant to the Urban system, particularly
26 ACSA customers. He noted that this project is double the cost that was
27 presented in the budget a year ago, but it is a big project that needs
28 prioritization. He mentioned that there are also a bunch of piping projects,
29 particularly between the Observatory Water Treatment Plant and Ragged
30 Mountain, and those costs are going up dramatically as well.

1 Mr. Parcels stated that this brings him back to his initial question of
2 how accelerating these projects makes financial sense. He stated that the
3 new pipeline from Ragged Mountain to Observatory Hill is necessary for
4 the expansion of the Observatory Hill expansion capacity, which is crucial
5 to infrastructure support, which he understands. He stated that the pipeline
6 project cost has probably doubled now. Mr. O'Connell replied that there is
7 the issue of current day costs vs. future costs and if there are any savings
8 by doing the project sooner rather than waiting a few years. He stated that
9 there are a lot of different moving parts. He noted that these are the biggest
10 cost increases he has seen in a long time. He mentioned that the
11 investment in infrastructure is necessary, but the ACSA will have to
12 determine what level is affordable for its customers, which will be a policy-
13 level decision. He added that he does not think a 5% increase will be
14 feasible.

15 Mr. Roberts stated that the ACSA made a 5% increase work last
16 year. Mr. Parcels stated that the ACSA is seeing a much bigger increase
17 from RWSA this year. Mr. Roberts stated that perhaps if the ACSA had of
18 passed on a larger increase to its customers last year, like 8%, there
19 wouldn't be such a great increase this year. Mr. O'Connell replied that last
20 year, the ACSA saw an 8% increase from RWSA last year. He mentioned
21 that this year, the increase is almost 14%, which is close to being double.
22 He noted that this is a bigger jump to mitigate than last year.

23 Mr. Roberts asked if the staff is looking for Board approval of the
24 FY 2024 Budget and Rate Schedule. Mr. Lunsford replied yes. Mr.
25 O'Connell stated that it is the same schedule as previous years, and the
26 staff just wanted to check with the Board to make sure they agree with that
27 schedule.

28 Mr. Parcels asked what the chance is that RWSA will surprise the
29 ACSA and change the projected numbers. Mr. O'Connell replied that he
30 thinks the surprise will be that the numbers will continue to go up over the
31 next few years, given inflation. He stated that RWSA's projects are very

1 big, and these are design numbers. He mentioned that the further RWSA
2 gets into the design phase, the more costs they see. He noted that the
3 construction marketplace is another piece to consider.

4 Mr. Parcels asked what number from RWSA the ACSA will use
5 when it begins its budget planning in April. Mr. O'Connell replied that the
6 current projected 14% increase is the starting point. He stated that
7 hopefully it will go down some. He mentioned, however, that if RWSA
8 revises a cost estimate on a project, they could come back to the table with
9 more costs, but he does not think that will be the case.

10 ***Mr. Parcels moved to approve the FY 2024 Budget and Rate***
11 ***Schedule, as presented to the Board, seconded by Mr. Armstrong. All***
12 ***members voted aye.***

13
14 10. Appointment of New ACSA Attorney

15 Mr. O'Connell stated that Jim Bowling will be ending his position as
16 ACSA Attorney at the end of this month. He stated that he was not able to
17 physically be at the meeting today, thus there will be a presentation in
18 January or February to recognize and honor his 50 years of representing
19 the ACSA.

20 Mr. O'Connell stated that Mike Derdeyn of the Flora Pettit law firm
21 has been doing some work with the ACSA staff and getting brought up to
22 speed. He stated that there have been a series of work sessions with Mr.
23 Derdeyn to give him some background, mostly around CIP projects. He
24 mentioned that the staff has worked on gathering all the legal documents
25 electronically to share with him as well.

26 Mr. O'Connell stated that before the Board today is an official
27 representation agreement for approval. He stated that the staff is also
28 asking the Board to authorize the Executive Director to sign the agreement.
29 He noted that if the Board approves the agreement, the ACSA will move
30 forward with Mike Derdeyn as its official attorney beginning January 1,
31 2023.

1 Mr. Roberts asked if this agreement parallels the agreement the
2 ACSA had with Jim Bowling. Mr. O'Connell replied that the rate does. He
3 mentioned that the agreement was designed to cover a variety of things.
4 He noted that the way the payments work and what Mr. Derdeyn will work
5 on will be very similar to the previous agreement with Mr. Bowling.

6 Mr. Roberts asked if Mr. Derdeyn agreed with the terms of the
7 agreement. Mr. Derdeyn replied that he and Gary spoke about the terms,
8 and he is happy with the agreement.

9 ***Mr. Armstrong moved to approve the General Representation***
10 ***Agreement with Mike Derdeyn and his firm Flora Pettit to represent***
11 ***the ACSA in legal matters, and to authorize the Executive Director to***
12 ***sign said agreement, seconded by Mr. Moore. The Chair asked for a***
13 ***roll-call vote: Mr. Parcels, aye; Mr. Tolbert, aye; Mr. Roberts, aye; Mr.***
14 ***Armstrong, aye; Mr. Moore, aye.***

15
16 11. Items Not on the Agenda

17 Mr. O'Connell stated that his only item was to wish everyone a
18 happy holiday.

19
20 12. Adjourn

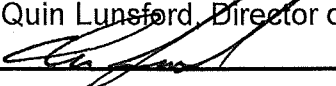
21 ***There being no further business, Mr. Parcels moved that the***
22 ***meeting be adjourned, seconded by Mr. Armstrong. All members***
23 ***voted aye.***

24
25
26
27
28

Gary B. O'Connell, Secretary-Treasurer

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Monthly Financial Reports STAFF CONTACT/PREPARER: Quin Lunsford, Director of Finance 	AGENDA DATE: January 19, 2023 ACTION: Informational ATTACHMENTS: Yes
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BACKGROUND: Water and sewer financial reports and check registers for the month of December are attached for your review.

DISCUSSION:

- Water consumption for the month of November decreased 2.5% compared to October. Water consumption for the month of November 2022 compared to November 2021 increased 0.1%.
- RWSA's invoice of \$1,987,793 for the month of November was paid on December 6, 2022.
- Unearned water and sewer connection charges totaled \$1,944,852 at month end.
- System connection charges were above budgeted expectations with \$904,620 recognized in November. Total system connection charges for FY 2023 are less than those in FY 2022 by 2%.
- Water and Wastewater revenues for FY 2023 are above budgeted expectations by 1.8%. Please see the water/wastewater trend analysis included illustrating that when adjustment for expected variations in seasonal consumption are considered, revenues are 3.4% lower than budgeted expectations.
- The ACSA has received \$15,609 for 34 ACSA customers that have submitted applications and requested assistance through the LIHWAP program for qualifying arrearages.

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 Consumption
7. Water and Sewer Report; Customer Class Report
8. Major Customer Analysis

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

- 9. Water/Wastewater Revenue Trend Analysis
- 10. Aged Receivables Analysis
- 11. Check Register

ALBEMARLE COUNTY SERVICE AUTHORITY

STATEMENT OF NET POSITION
December 31, 2022

ASSETS

Cash and cash equivalents	\$ 10,595,878
Accounts receivable	4,543,397
Investments	42,916,461
Capital assets: (net of accumulated depreciation)	177,717,344
Inventory	576,841
Prepays	17,805
Cash and cash equivalents, restricted	<u>399,897</u>
Total assets	<u>236,767,623</u>

DEFERRED OUTFLOWS OF RESOURCES

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

LIABILITIES

Accounts payable	2,083,128
Accrued liabilities	359,620
Compensated absences	763,469
Net pension liability	695,494
Other post-employment benefits	1,144,368
Unearned connection fees	1,944,852
Long-term debt	<u>4,669,118</u>
Total liabilities	<u>11,660,049</u>

DEFERRED INFLOWS OF RESOURCES

Combined deferred inflows of resources	<u>2,880,258</u>
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NET POSITION

<u><u>223,401,457</u></u>

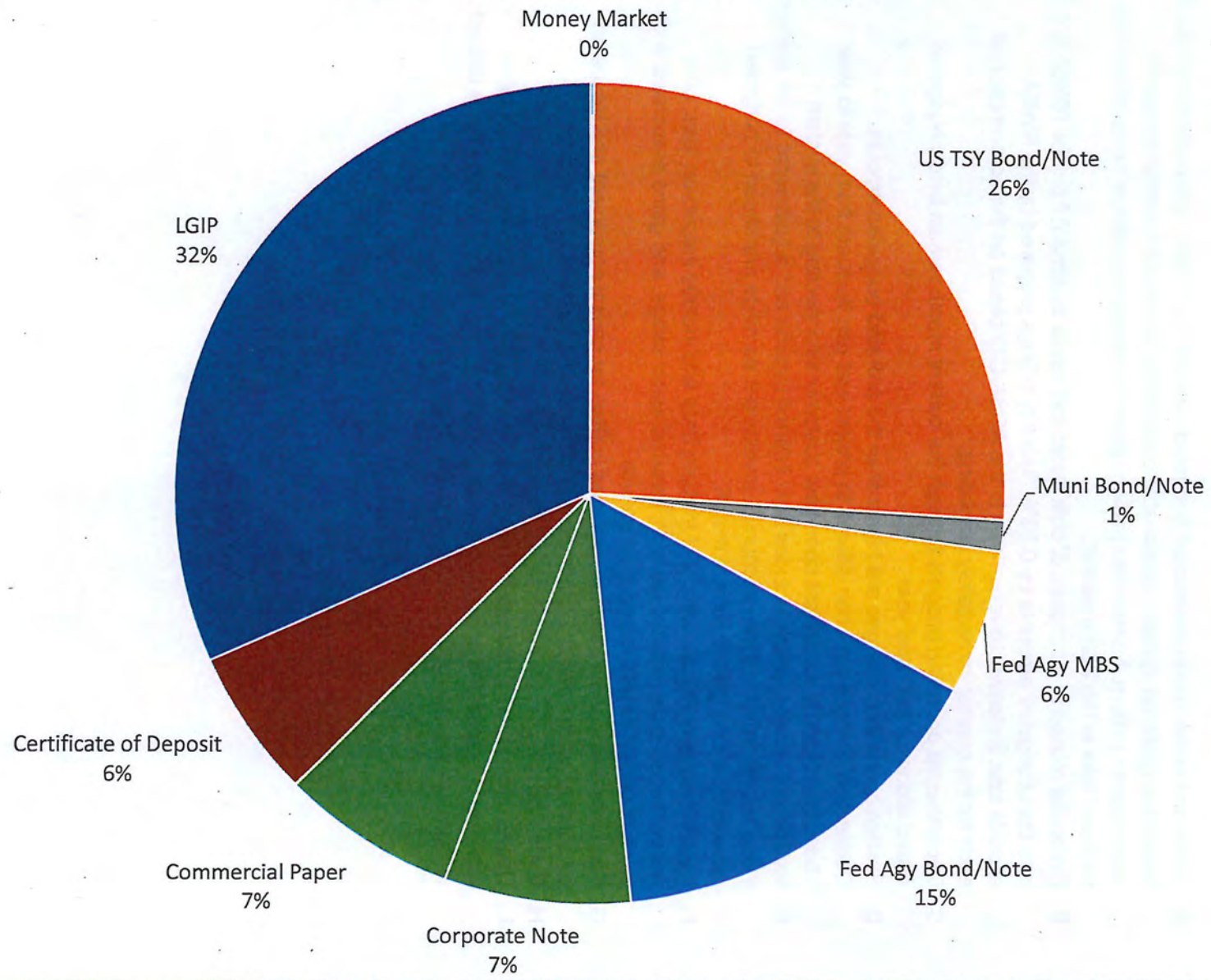
ALBEMARLE COUNTY SERVICE AUTHORITY
For the One Month Ending December 31, 2022

	Budget FY 2023	Budget Year-to-Date 2023	December Actual Year-to-Date	Actual vs. Budget	Variance Percentage
Revenues					
Water Sales	19,285,000.	9,642,500.	9,762,718.	120,218.	1.25%
Sewer Service	15,137,000.	7,568,500.	7,750,682.	182,182.	2.41%
Total operating revenues	34,422,000.	17,211,000.	17,513,400.	302,400.	1.76% A
Operating Expenses					
Purchase of bulk water	(13,774,000.)	(6,887,000.)	(7,039,728.)	(152,728.)	2.22% B
Purchase of sewer treatment	(10,776,000.)	(5,388,000.)	(5,169,847.)	218,153.	(4.05%) B
Administration	(1,306,475.)	(653,238.)	(645,453.)	7,785.	(1.19%) C
Finance	(2,516,082.)	(1,258,041.)	(1,204,751.)	53,290.	(4.24%) C
Information Technology	(1,521,900.)	(760,950.)	(686,677.)	74,273.	(9.76%) C
Engineering	(2,289,721.)	(1,144,861.)	(1,098,225.)	46,636.	(4.07%) C
Maintenance	(4,726,083.)	(2,363,042.)	(1,896,183.)	466,859.	(19.76%) C
Total operating expenses	(36,910,261.)	(18,455,131.)	(17,740,864.)	714,267.	(3.87%)
Operating gain(loss)	(2,488,261.)	(1,244,131.)	(227,464.)	1,016,667.	(81.72%)
Nonoperating Revenues					
System connection charges	5,926,800.	2,963,400.	4,709,180.	1,745,780.	58.91% D
Investment/Interest Income	100,000.	50,000.	194,372.	144,372.	288.74% E
Rental Income	16,000.	8,000.	7,293.	(707.)	(8.84%)
Miscellaneous revenues	455,000.	227,500.	458,884.	231,384.	101.71% F
Total nonoperating revenues (expenses)	6,497,800.	3,248,900.	5,369,729.	2,120,829.	65.28%
Nonoperating Expenses					
Miscellaneous expenses	(434,200.)	(217,100.)	(118,582.)	98,518.	(45.38%) G
Bond interest charges	(162,272.)	(81,136.)	(106,600.)	(25,464.)	31.38% H
Depreciation	0.	0.	(2,080,348.)	(2,080,348.)	0.00% I
Total nonoperating revenues (expenses)	(596,472.)	(298,236.)	(2,305,530.)	(2,007,294.)	673.06%
Capital contributions	0.	0.	475,503.	475,503.	0.00%
Change in Net Position	3,413,067.	1,706,533.	3,312,238.	1,605,705.	94.09%

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

- A.** Water and sewer revenues exceed budgeted amounts by 1.76%. Consumption through December (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 0.53%. 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

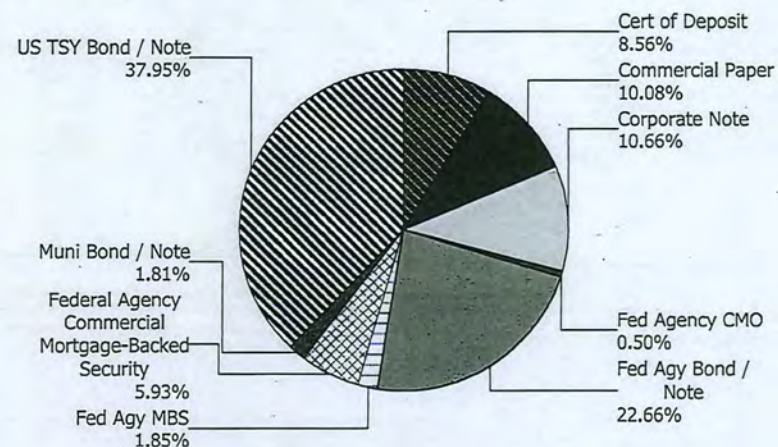
For the Month Ending December 31, 2022

ACSA OPERATING FUNDS - 03100100

Account Summary

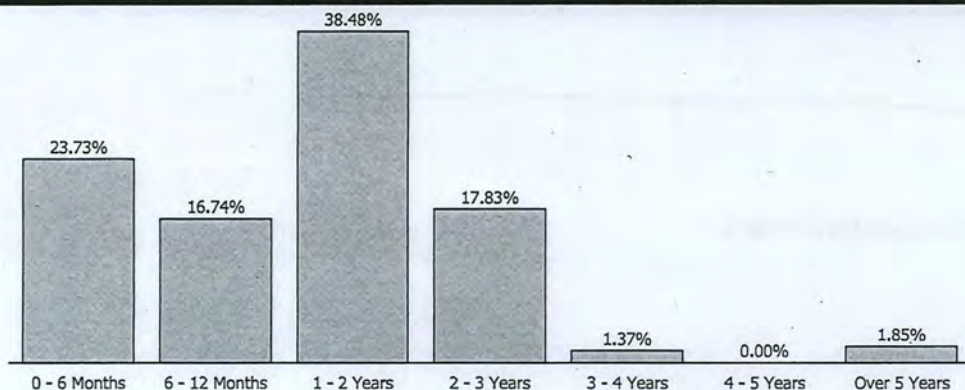
Description	Par Value	Market Value	Percent
U.S. Treasury Bond / Note	11,705,000.00	11,106,476.82	37.95
Municipal Bond / Note	550,000.00	528,368.00	1.81
Federal Agency Mortgage-Backed Security	575,763.86	540,472.99	1.85
Federal Agency Commercial Mortgage-Backed Security	1,786,908.64	1,735,705.42	5.93
Federal Agency Collateralized Mortgage Obligation	150,000.00	146,042.13	0.50
Federal Agency Bond / Note	6,810,000.00	6,628,806.43	22.66
Corporate Note	3,200,000.00	3,118,234.60	10.66
Commercial Paper	3,000,000.00	2,948,439.00	10.08
Certificate of Deposit	2,525,000.00	2,505,870.98	8.56
Managed Account Sub-Total	30,302,672.50	29,258,416.37	100.00%
Accrued Interest		92,722.81	
Total Portfolio	30,302,672.50	29,351,139.18	

Sector Allocation



Unsettled Trades 0.00 0.00

Maturity Distribution



Characteristics

Yield to Maturity at Cost	2.08%
Yield to Maturity at Market	4.75%
Weighted Average Days to Maturity	535

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
November 2022

Area	November 2022 Monthly Connection Fees	November 2021 Monthly Connection Fees	\$ Change	% Change
Crozet	\$ 67,350	\$ 134,700	\$ (67,350)	-50%
Urban	837,270	521,600	315,670	61%
Scottsville	-	-	-	-
Total Connection fees	\$ 904,620	\$ 656,300	\$ 248,320	38%
Through November				
Area	YTD FY 2023 Connection Fees	YTD FY 2022 Connection Fees	\$ Change	% Change
Crozet	\$ 794,730	\$ 592,680	\$ 202,050	34%
Urban	3,355,445	3,660,110	(304,665)	-8%
Scottsville	-	-	-	-
Total Connection fees	\$ 4,150,175	\$ 4,252,790	\$ (102,615)	-2%

Area	November 2022 ERC's	November 2021 ERC's	Change	% Change
Crozet	5	10	(5)	-50%
Urban	62	39	23	59%
Scottsville	-	-	-	-
Total ERC's	67	49	18	37%
Through November				
Area	YTD FY 2023 ERC's	YTD FY 2022 ERC's	Change	% Change
Crozet	59	44	15	34%
Urban	249	272	(23)	-8%
Scottsville	-	-	-	-
Total ERC's - YTD	308	316	(8)	-3%

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
November 2022**

Area	November 2022 ERC's	November 2021 ERC's	November 2020 ERC's
Crozet	5	10	22
Urban	62	39	37
Scottsville	-	-	-
Total ERC's	67	49	59

Through November			
Area	YTD 2023 ERC's	YTD 2022 ERC's	YTD 2021 ERC's
Crozet	59	44	109
Urban	249	272	253
Scottsville	-	-	-
Total ERC's - YTD	308	316	362

Note: The information above presents 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
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		140,551,064	-100.00%		0.26
January		142,192,560	-100.00%		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
	772,853,390	1,793,928,984		20.07	41.62
YTD	772,853,390	821,863,478	-5.96%	20.07	18.63

Note: Consumption through November 2022 is 5.96% 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)

November 2022

Billed by Area:	Water	Sewer
Crozet	16,197,624	14,842,291
Scottsville	1,500,590	795,890
Urban	131,023,298	113,050,202
Red Hill	40,309	0
Total	148,761,821	128,688,383

Billing by Sewer Plant:	
AWT	127,892,493
less Glenmore	(4,303,724)
Urban Total	123,588,769
Scottsville	795,890
Total	124,384,659

Number of Installed Meters:	
Urban	32
Crozet	5
Scottsville	0
Total	37

Urban	415,300
Crozet	14,700
Scottsville	0
Total	430,000

Unmetered Consumption:	
ACSA Fire Flow Consump.	32,368
Total	32,368

Unmetered Leak Consumption:	
1241 Orchard Dr-11/4	Crozet 200
1500 State Farm Blvd-11/17	Urban 200
Pepperidge Ln-11/22	Urban 500
Total	900

Billed Consumption for Selected Customers

	<u>Water</u>	<u>Sewer</u>		<u>Water</u>	<u>Sewer</u>
*Virginia Land Holding	360,939	360,939	Boar's Head Inn	446,608	407,308
Southwood Mobile Homes	1,514,260	2,020,000	Farmington, Inc.	845,820	420,984
Turtle Creek Apts.	1,349,683	1,348,783	Westgate Apts.	1,272,791	1,272,191
Barracks West Apartments	1,454,200	1,454,200	Abbingdon Crossing	1,884,832	1,884,832
Monroe Health & Rehab.	964,086	964,086	Four Seasons Apts	1,892,499	1,892,499
Sunrise Senior "Colonnades"	830,878	767,873	Ch'ville/Alb Airport	118,976	119,748
ACRJ	1,030,210	954,210	State Farm	127,140	18,140
Westminster Canterbury	1,457,890	1,359,890	Hyatt @ Stonefield	421,367	421,367
SEMF Charleston	1,421,852	1,421,852	Doubletree	611,132	611,132
Martha Jefferson Hospital	1,744,721	1,263,541	Arden Place Apts	504,611	504,611
Crozet Mobile Home Village	266,900	266,900	Hilton Garden Inn	324,429	276,051
Fashion Square Mall	53,639	53,639	The Blake @ Charlottesville	337,786	337,786
County of Albemarle	1,295,740	1,152,753	The Lodge @ Old Trail	228,031	228,031
University of Virginia	1,490,511	1,487,946	Gov't-Defense Complex	588,183	588,182
Wegmans	332,393	332,393	Harris Teeter Stores	130,435	130,435

* Indicates Industrial Discharge Permit Holders

November 2022

WATER

Class Type	Number of Connections by Area			Total
	Urban	Crozet	Scottsville	
Single-Family Residential	15,746	3,740	196	19,682
Multi-Family Residential	557	43	3	603
Commercial (Offices)	203	12	5	220
Commercial (Other)	923	76	52	1,051
Industrial	36	11	3	50
Institutional	171	32	12	215
Total Water Accounts	17,636	3,914	271	21,821
Plus Multiple Units	12,877	748	89	13,714
Total Water Units	30,513	4,662	360	35,535

SEWER

Class Type	Number of Connections by Area			Total
	Urban	Crozet	Scottsville	
Single-Family Residential	13,436	3,462	158	17,056
Multi-Family Residential	526	41	4	571
Commercial (Offices)	187	12	5	204
Commercial (Other)	717	52	42	811
Industrial	15	5	1	21
Institutional	133	25	11	169
Total Sewer Accounts	15,014	3,597	221	18,832
Plus Multiple Units	12,460	745	56	13,261
Total Sewer Units	27,474	4,342	277	32,093

POPULATION SERVED

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

	Urban	Crozet	Scottsville	Total
Total Water Customers	71,558	11,220	713	83,490
Total Sewer Customers	64,740	10,518	535	75,793

Albemarle County Service Authority
Major Customer Analysis
November 2022 and October 2022

	November 2022		October 2022		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
Turtle Creek Apts.	1,349,683	1,348,783	1,234,030	1,230,530	9.37%	9.61%
Westgate Apts.	1,272,791	1,272,191	1,225,999	1,225,599	3.82%	3.80%
Four Seasons Apts.	1,892,499	1,892,499	1,932,601	1,932,601	-2.08%	-2.08%
Barracks West Apartments	1,454,200	1,454,200	1,486,900	1,486,900	-2.20%	-2.20%
Abbingtion Crossing	1,884,832	1,884,832	1,956,537	1,956,537	-3.66%	-3.66%
Westmisnster Canterbury	1,457,890	1,359,890	1,537,200	1,431,200	-5.16%	-4.98%
SEMF Charleston	1,421,852	1,421,852	1,517,208	1,517,208	-6.28%	-6.28%
Southwood Mobile Homes	1,514,260	2,020,000	1,632,960	2,060,000	-7.27%	-1.94%
Martha Jefferson Hospital	1,744,721	1,263,541	1,979,781	1,139,781	-11.87%	10.86%
University of Virginia	1,490,511	1,487,946	1,742,775	1,741,162	-14.47%	-14.54%
ACRJ	1,030,210	954,210	1,281,440	1,124,440	-19.61%	-15.14%
County of Albemarle	1,295,740	1,152,753	1,929,496	1,436,558	-32.85%	-19.76%

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
November 2022 and November 2021

	November 2022		November 2021		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
Four Seasons Apts.	1,892,499	1,892,499	1,526,000	1,526,000	24.02%	24.02%
Westgate Apts.	1,272,791	1,272,191	1,088,000	1,088,000	16.98%	16.93%
Martha Jefferson Hospital	1,744,721	1,263,541	1,505,252	946,252	15.91%	33.53%
Abbingdon Crossing	1,884,832	1,884,832	1,677,400	1,677,400	12.37%	12.37%
Turtle Creek Apts.	1,349,683	1,348,783	1,287,200	1,286,000	4.85%	4.88%
County of Albemarle	1,295,740	1,152,753	1,286,363	1,143,363	0.73%	0.82%
Barracks West Apartments	1,454,200	1,454,200	1,464,400	1,464,400	-0.70%	-0.70%
Southwood Mobile Homes	1,514,260	2,020,000	1,782,000	3,329,180	-15.02%	-39.32%
Westminster Canterbury	1,457,890	1,359,890	1,811,270	1,459,270	-19.51%	-6.81%
University of Virginia	1,490,511	1,487,946	1,966,069	1,896,400	-24.19%	-21.54%
SEMF Charleston	1,421,852	1,421,852	1,940,400	1,940,400	-26.72%	-26.72%
ACRI	1,030,210	954,210	1,568,990	1,411,990	-34.34%	-32.42%

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 -- November

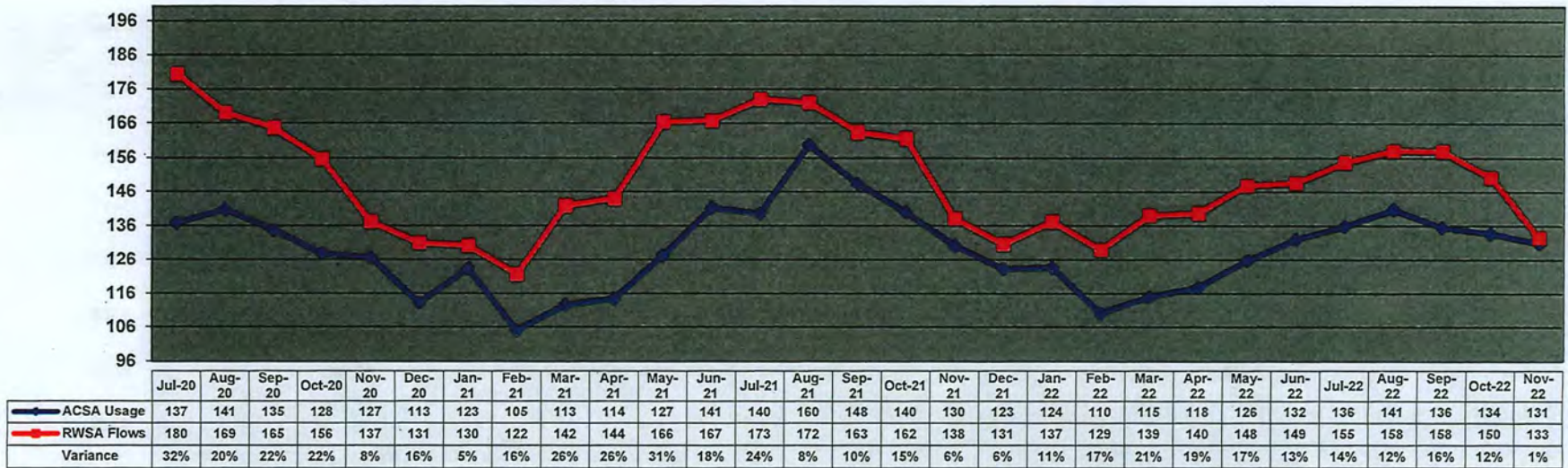
	YTD FY 2023		YTD FY 2022		Increase(Decrease)	Increase(Decrease)
	Water*	Sewer*	Water*	Sewer*	Water Consumption	Sewer Usage
Four Seasons Apts.	8,467,426	8,467,426	7,889,000	7,889,000	7.33%	7.33%
Abbingdon Crossing	9,254,678	9,254,678	8,816,200	8,816,200	4.97%	4.97%
Martha Jefferson Hospital	11,617,539	5,492,035	11,316,363	5,273,763	2.66%	4.14%
Westgate Apts.	6,366,661	6,360,361	6,208,000	6,199,300	2.56%	2.60%
Barracks West Apartments	7,416,600	7,416,600	7,300,000	7,300,000	1.60%	1.60%
Turtle Creek Apts.	6,201,934	6,176,634	6,300,300	6,294,000	-1.56%	-1.86%
Southwood Mobile Homes	9,081,255	10,650,000	9,870,000	19,645,244	-7.99%	-45.79%
County of Albemarle	7,084,676	5,481,566	8,287,884	6,138,084	-14.52%	-10.70%
Westminster Canterbury	7,824,290	7,301,290	9,389,270	7,877,270	-16.67%	-7.31%
University of Virginia	10,547,547	10,524,808	14,155,950	13,943,593	-25.49%	-24.52%
ACRJ	5,741,710	4,780,710	8,121,810	7,158,810	-29.31%	-33.22%
SEMF Charleston	7,074,301	7,074,301	11,694,650	11,694,650	-39.51%	-39.51%

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.

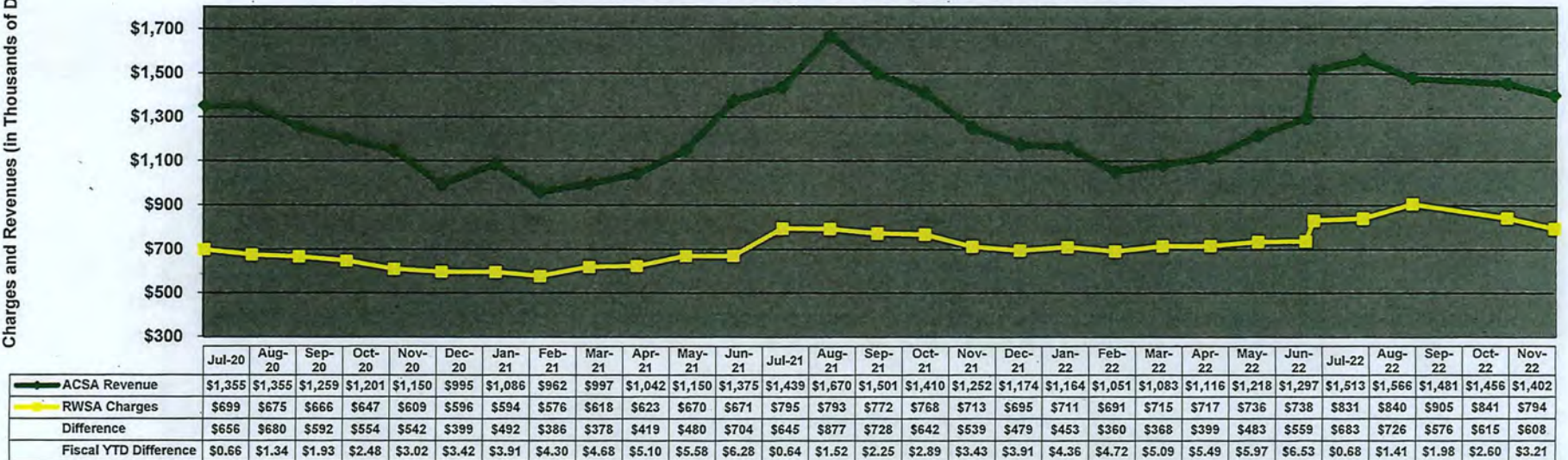
**FY 2021, 2022, and 2023 Urban Water Comparison
RWSA Flows & ACSA Customer Usage**

Flows & Usage (in Millions of Gallons)



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

Charges and Revenues (in Thousands of Dollars)

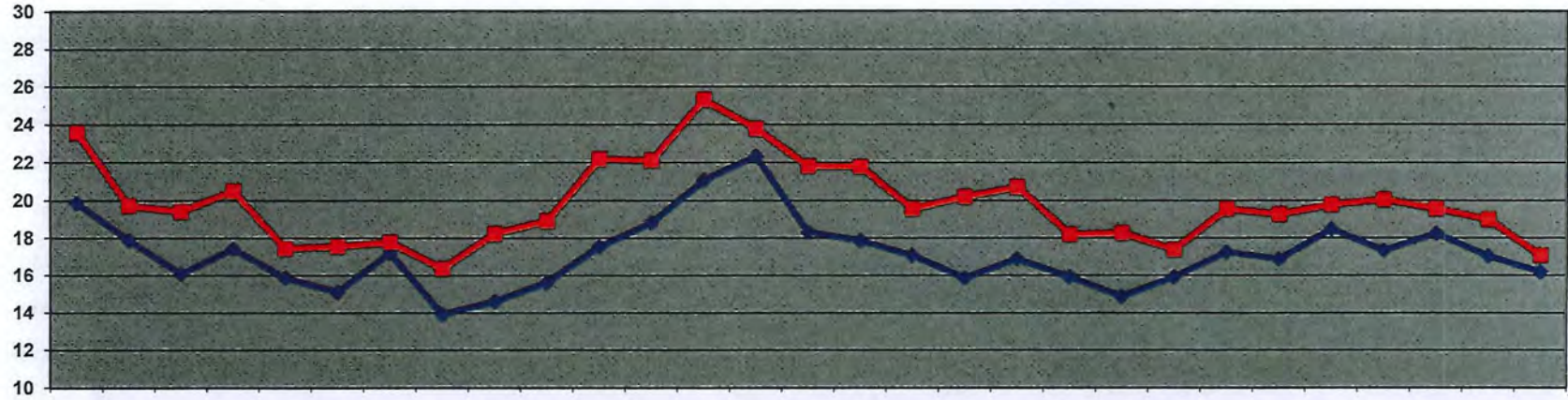


Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

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

52

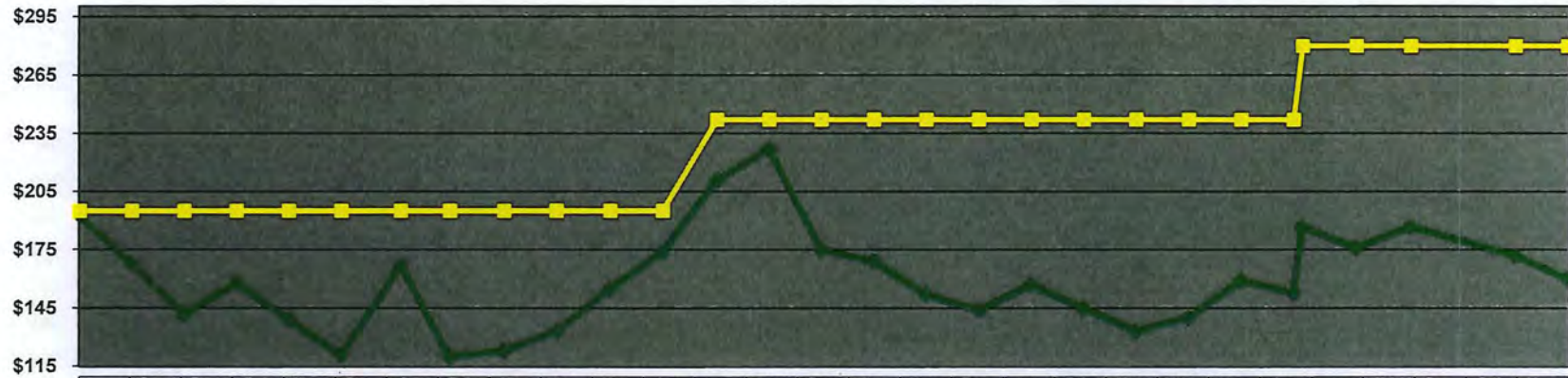
Flows & Usage (in Millions of Gallons)



	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
ACSA Usage	20	18	16	17	16	15	17	14	15	16	18	19	21	22	18	18	17	16	17	16	15	16	17	17	18	17	18	17	16
RWSA Flows	24	20	19	21	17	18	18	16	18	19	22	22	25	24	22	22	20	20	21	18	18	17	20	19	20	20	20	19	17
Variance	18%	10%	21%	18%	10%	16%	3%	17%	25%	21%	26%	18%	20%	6%	19%	22%	15%	27%	23%	14%	23%	9%	13%	14%	7%	16%	7%	11%	5%

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

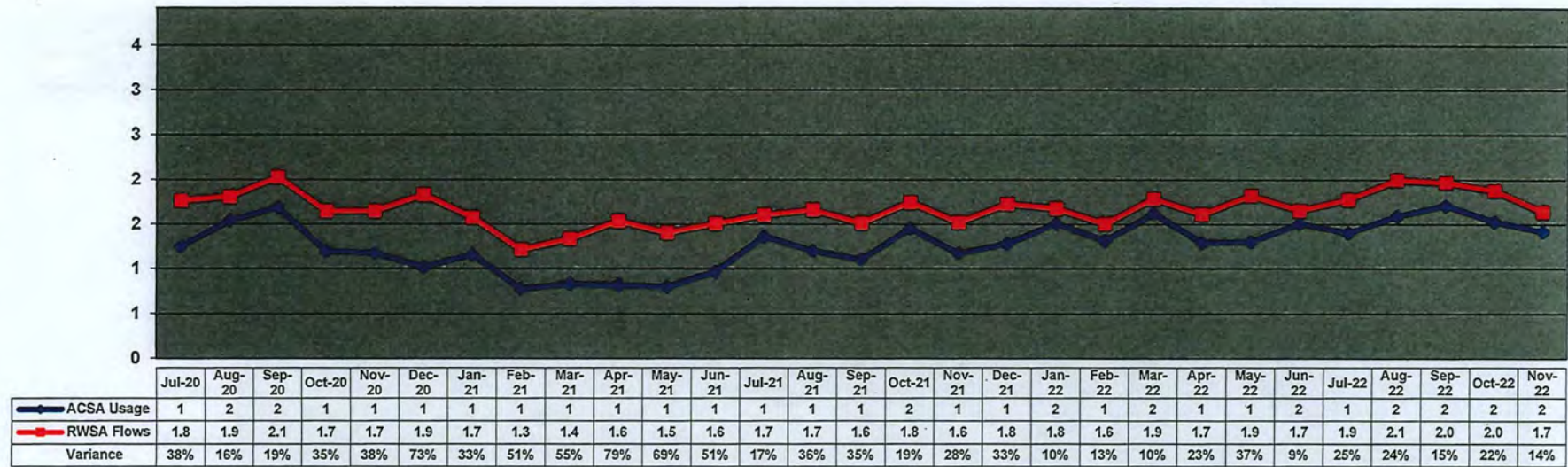
Charges and Revenues (in Thousands of Dollars)



	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
ACSA Revenue	\$193	\$168	\$142	\$158	\$139	\$121	\$167	\$120	\$123	\$133	\$155	\$174	\$211	\$227	\$175	\$169	\$152	\$144	\$157	\$145	\$133	\$140	\$159	\$153	\$187	\$176	\$187	\$172	\$160
RWSA Charges	\$195	\$195	\$195	\$195	\$195	\$195	\$195	\$195	\$195	\$195	\$195	\$195	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$242	\$280	\$280	\$280	\$280	\$280
Difference	(\$2)	(\$27)	(\$53)	(\$37)	(\$56)	(\$74)	(\$28)	(\$75)	(\$72)	(\$62)	(\$40)	(\$21)	(\$31)	(\$15)	(\$67)	(\$73)	(\$90)	(\$98)	(\$85)	(\$97)	(\$109)	(\$102)	(\$83)	(\$89)	(\$93)	(\$104)	(\$93)	(\$108)	(\$120)
Fiscal YTD Difference	\$0.00	-\$0.03	-\$0.05	-\$0.04	-\$0.06	-\$0.07	-\$0.03	-\$0.08	-\$0.07	-\$0.06	-\$0.04	-\$0.02	-\$0.03	(\$0.05)	(\$0.11)	(\$0.19)	(\$0.28)	(\$0.37)	(\$0.46)	(\$0.56)	(\$0.67)	(\$0.77)	(\$0.85)	(\$0.94)	(\$0.09)	(\$0.20)	(\$0.29)	(\$0.40)	(\$0.52)

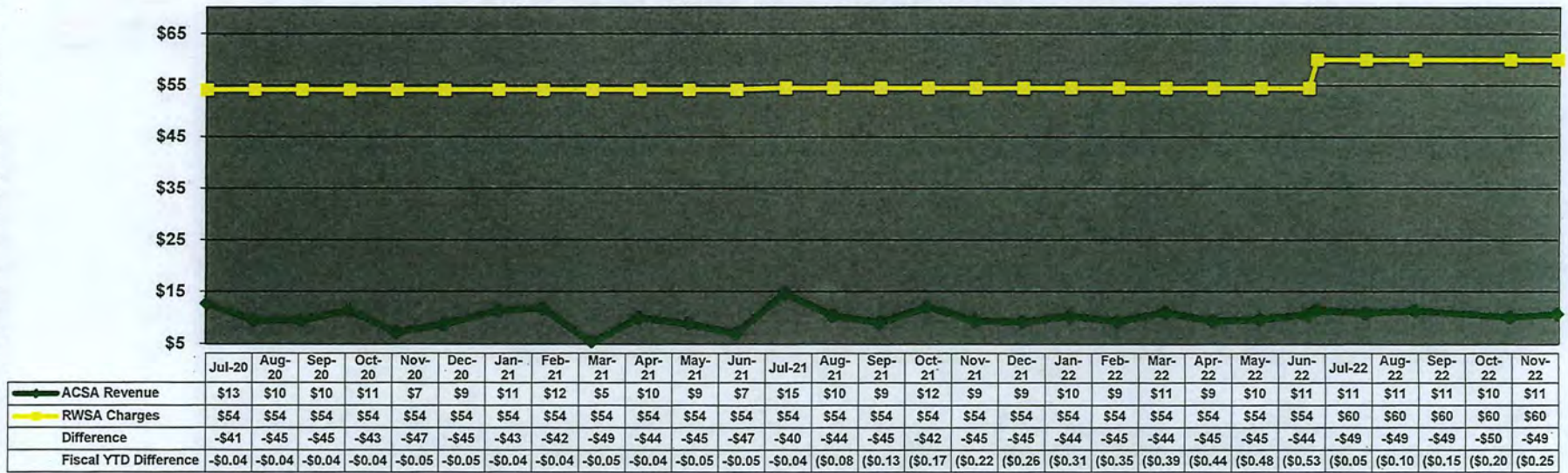
FY 2021, 2022, and 2023 Scottsville Water Comparison RWSA Flows & ACSA Customer Usage

Flows & Usage (in Millions of Gallons)



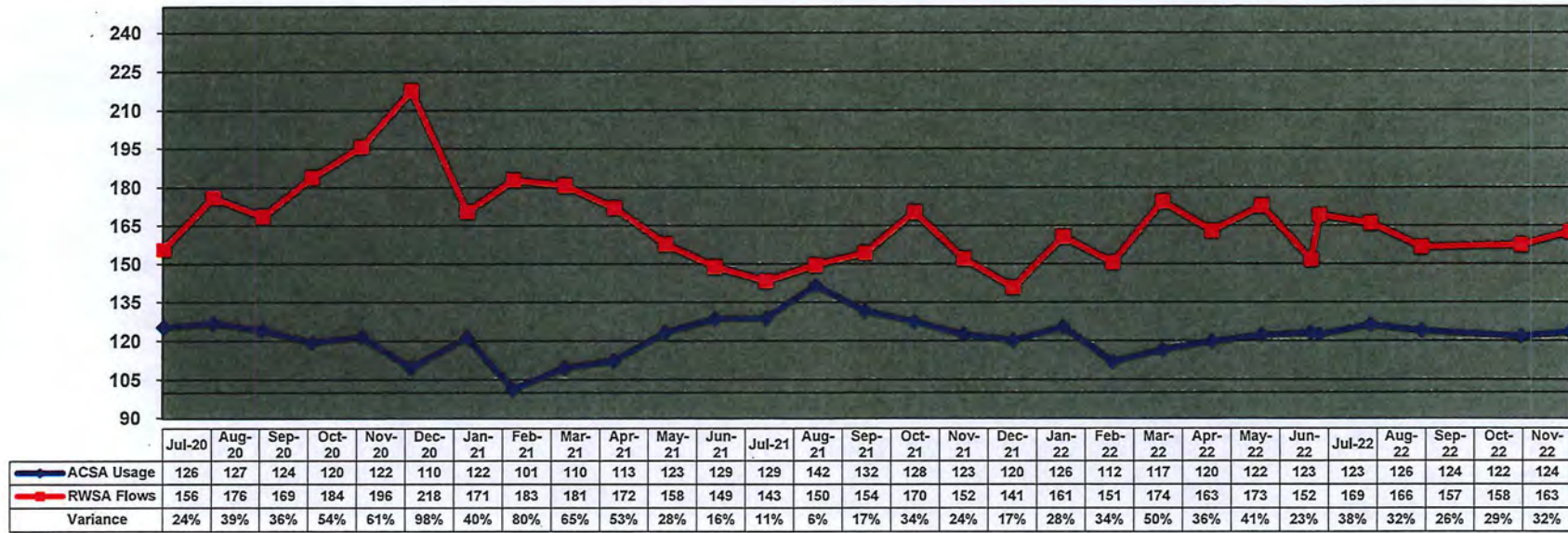
FY 2021, 2022, and 2023 Scottsville Water Comparison RWSA Billed Water Charges & ACSA Billed Water Revenues

Charges and Revenues (in Thousands of Dollars)



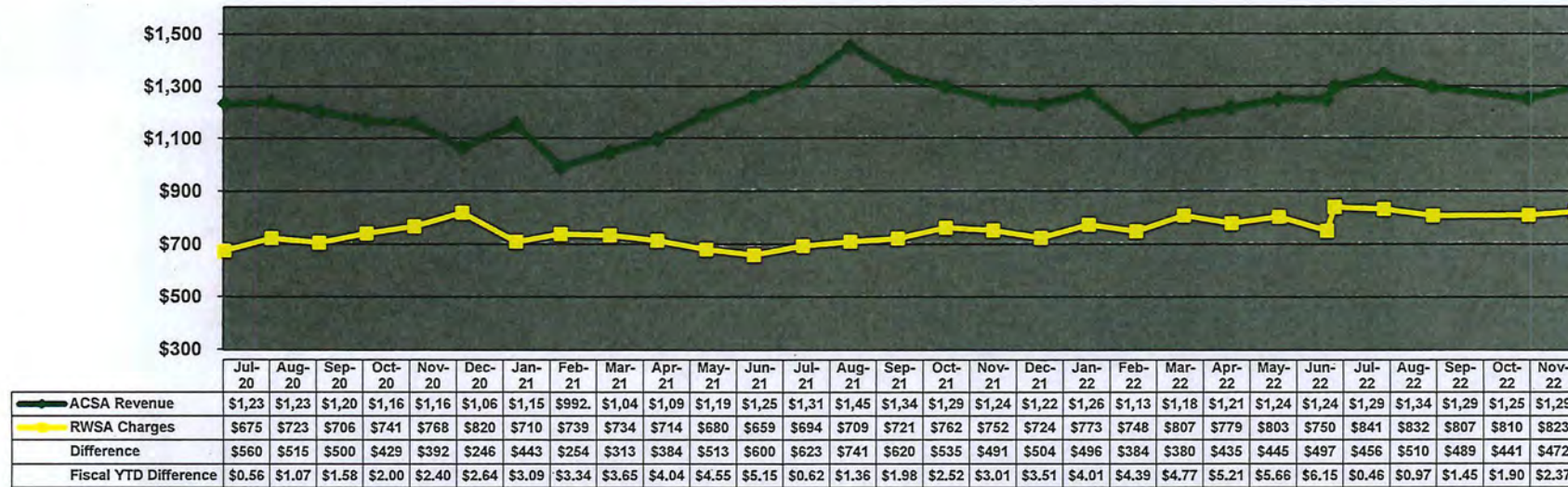
**FY 2021, 2022, and 2023 Urban (including Glenmore) & Crozet Sewer Comparison
ACSA Customer Usage & RWSA Flows**

Usage & Flows (in Millions of Gallons)



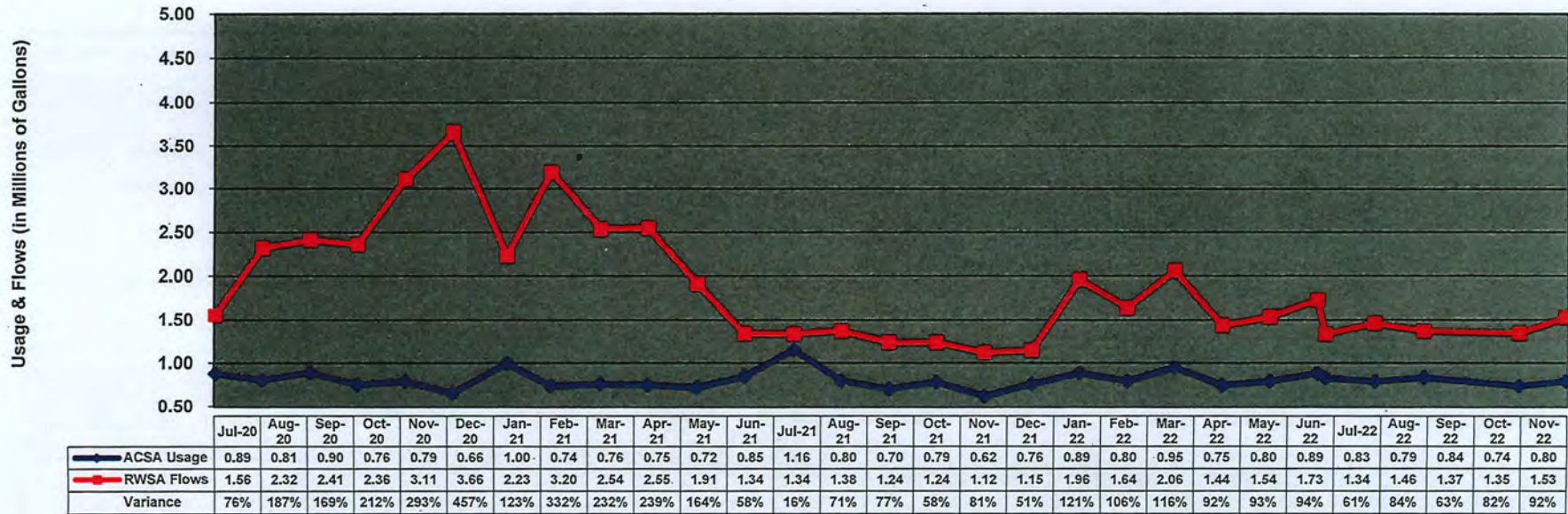
**FY 2021, 2022, and 2023 Urban (including Glenmore) & Crozet Sewer Comparison
ACSA Billed Sewer Usage & RWSA Billed Sewer Charges**

Charges & Revenues (in Thousands of Dollars)

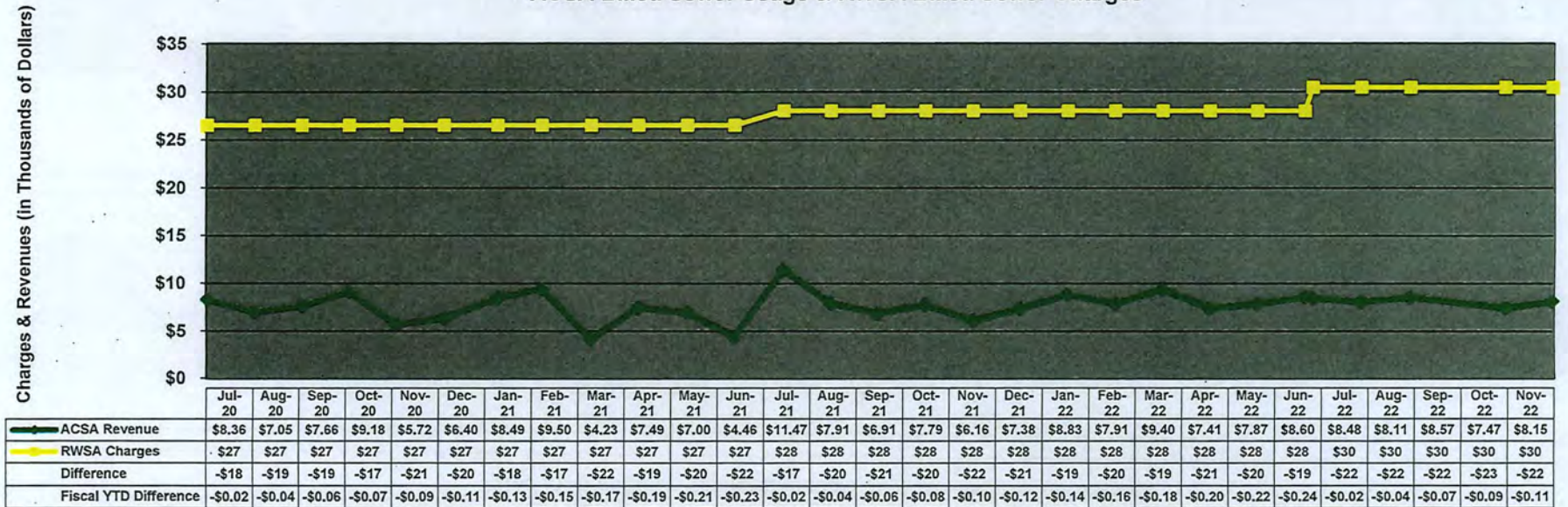


Note: Fiscal YTD Difference (ONLY) in Millions of Dollars

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



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



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

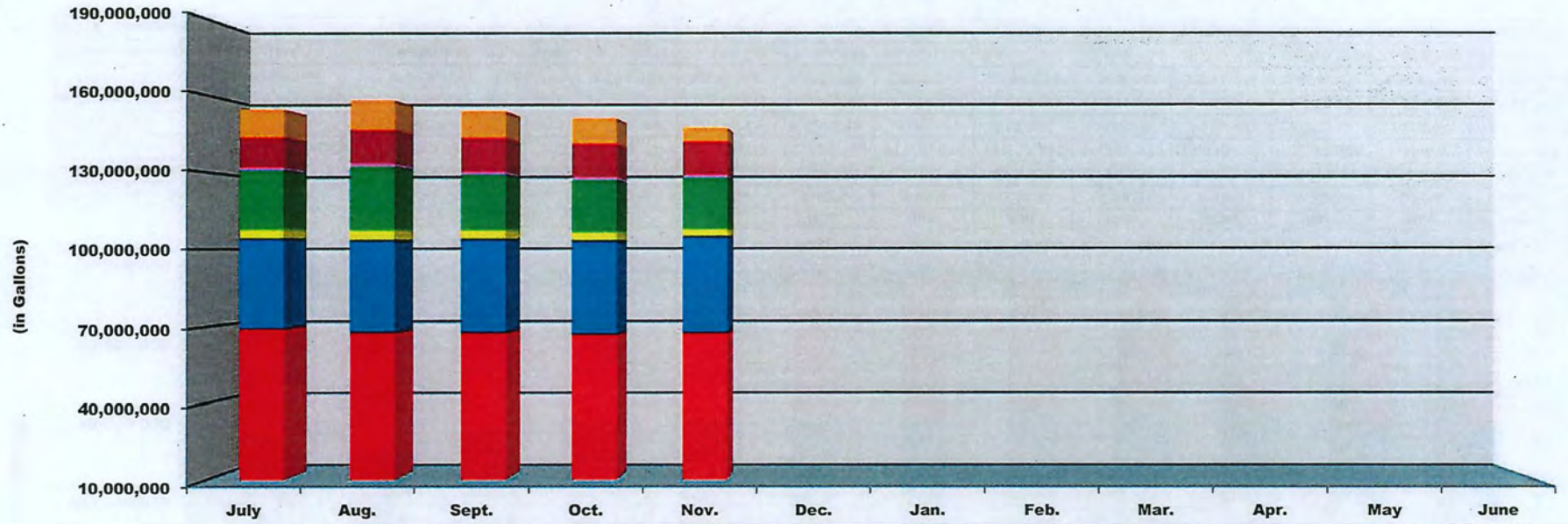
	FY 2023											
	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	45,599,911	45,505,082	45,632,349	45,357,143	45,992,076							
Level 2 (3,001 - 6,000 gallons)	16,363,636	15,612,084	15,525,446	15,374,370	15,677,968							
Level 3 (6,001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

System-Wide Irrigation Water Usage

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

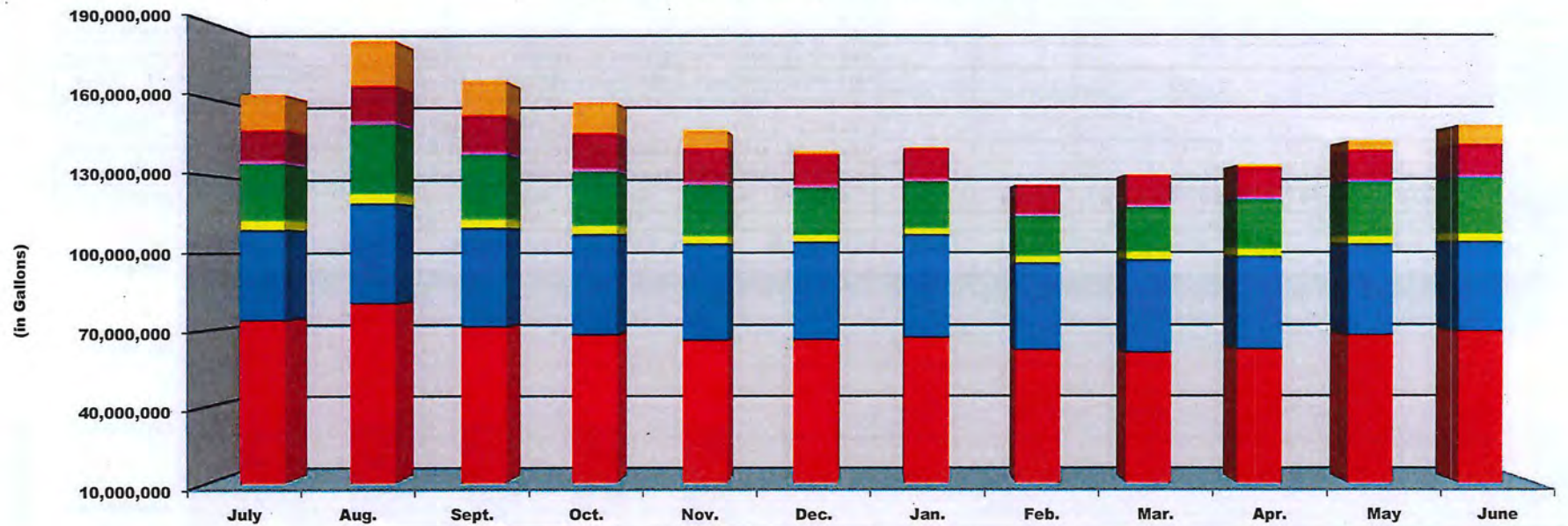
FY 2022	July	August	September	October	November	December	January	February	March	April	May	June
Level 1 (0 - 3,000 gallons)	186,665	182,392	180,649	172,364	89,160							
Level 2 (3,001 - 6,000 gallons)	827,558	825,362	768,256	786,824	459,256							
Level 3 (6,001 - 9,000 gallons)	990,172	970,507	887,729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

Monthly Water Consumption Fiscal Year 2023



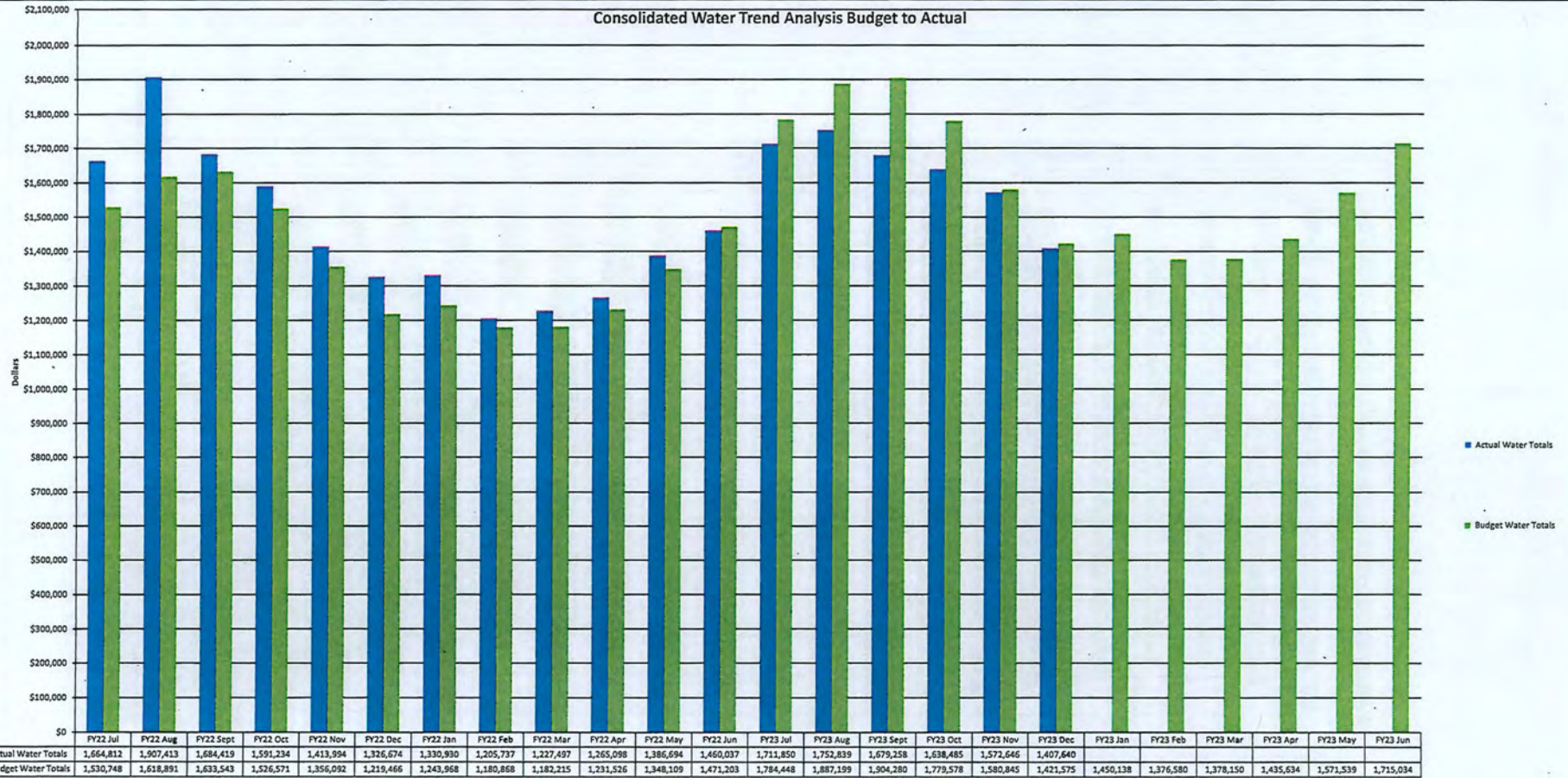
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
% Irrigation to total	7.24%	7.54%	7.02%	6.70%	3.75%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Total Irrigation	11,175,137	11,900,819	10,767,652	10,097,825	5,513,080							
Institutional - Domestic Consumption	11,319,291	12,674,993	12,747,929	12,683,947	12,771,652							
Industrial	939,061	1,164,077	948,893	933,427	833,612							
Comm. (Other) - Domestic Consumption	23,118,746	24,680,610	21,554,311	20,295,040	20,004,641							
Offices - Domestic Consumption	3,674,283	4,083,421	3,700,076	3,470,304	3,043,916							
MFR - Domestic Consumption	34,974,805	35,804,051	36,296,110	36,410,800	37,401,009							
SFR - Domestic Consumption	69,126,793	67,577,187	67,479,481	66,746,613	67,286,795							

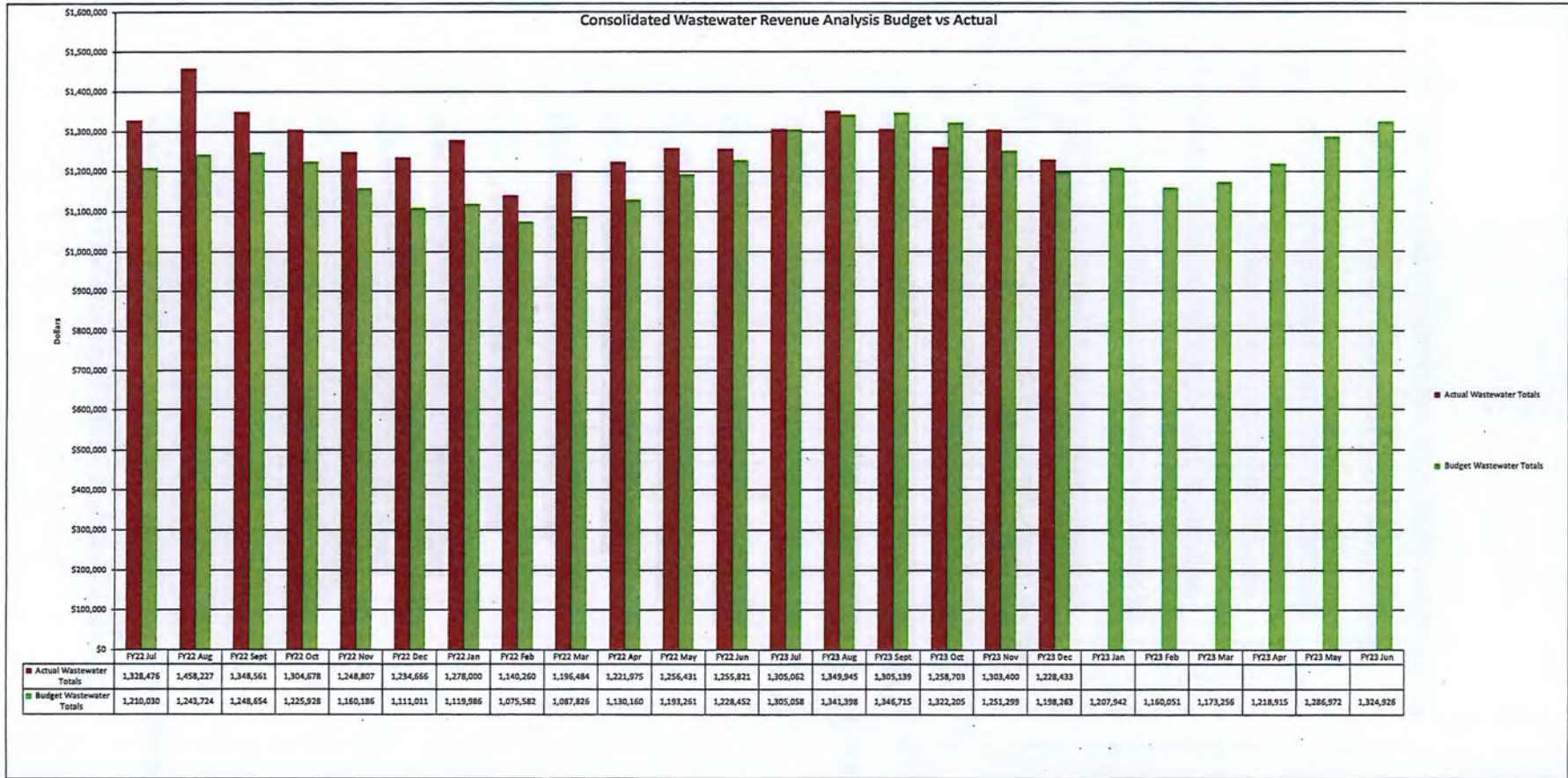
Monthly Water Consumption Fiscal Year 2022

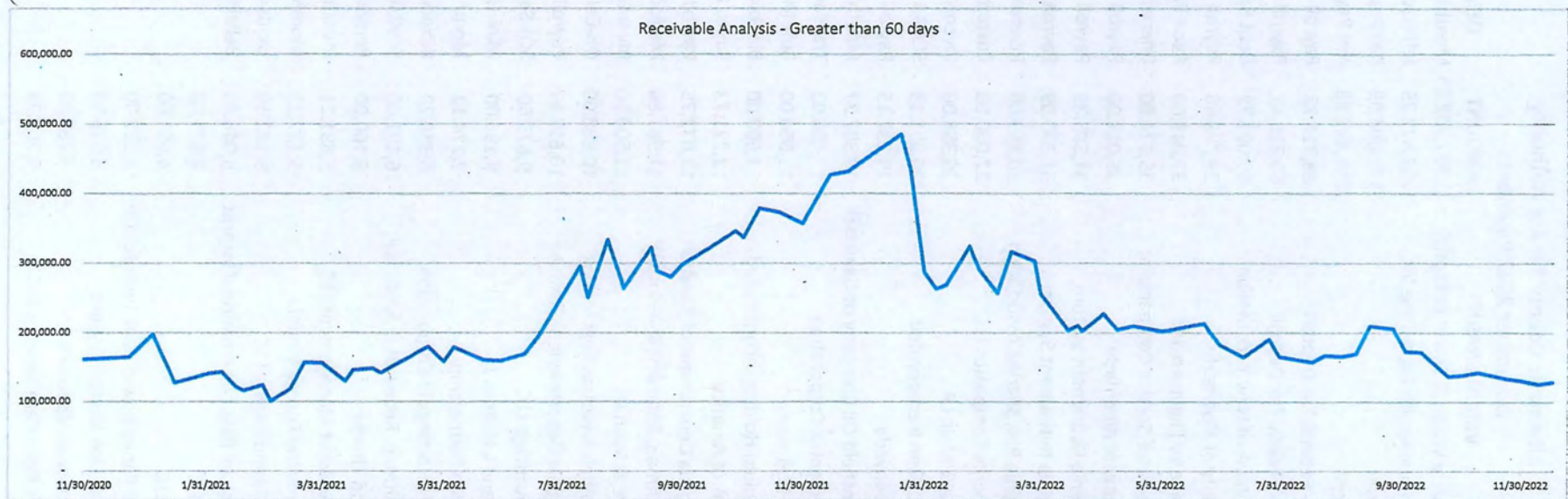


	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
% Irrigation to total	8.73%	9.74%	8.19%	7.63%	4.82%	1.01%	0.34%	0.28%	0.38%	0.79%	2.57%	5.03%
Total Irrigation	14,081,507	17,746,655	13,631,436	12,050,529	7,093,317	1,406,778	470,655	357,324	497,487	1,058,531	3,669,728	7,491,053
Institutional - 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

Consolidated Water Trend Analysis Budget to Actual







Albemarle County Service Authority
December 2022 Payments

CHECK NUMBER	CHECK DATE	VENDOR NAME	AMOUNT	DESCRIPTION OVER \$5,000
Wire	12/6/2022	Rivanna Water & Sewer Authority	1,987,792.83	Monthly Service
65190	12/15/2022	Commonwealth Excavating Inc	206,572.75	Jefferson Village WMRP
	12/30/2022	Payroll	172,604.99	Net Pay
	12/15/2022	Payroll	155,833.88	Net Pay
228470200	12/30/2022	IRS - Federal Tax Deposit	68,716.28	Payroll
228470190	12/15/2022	IRS - Federal Tax Deposit	60,215.41	Payroll
Wire	12/22/2022	The Bank of New York Mellon	49,081.78	Debt Service
228470199	12/30/2022	County of Albemarle	39,286.66	Payroll
65197	12/15/2022	Dewberry Engineers Inc	37,043.00	Avon Property PH1 Dev & PH2
65210	12/15/2022	Generator Service Company Inc	35,974.00	Briarwood Generator
228470189	12/30/2022	County of Albemarle	35,013.00	Payroll
228470186	12/15/2022	Virginia Retirement System	31,505.39	Payroll
228470196	12/30/2022	Virginia Retirement System	31,370.09	Payroll
65337	12/30/2022	Virginia Risk Sharing Association	30,899.00	Insurance/Worker's Compensation
65200	12/15/2022	E Source Companies LLC	27,000.00	Customer Experience and Asses
65192	12/15/2022	Core & Main LP	26,358.00	Inventory - Meters
65305	12/30/2022	M C Dean Incorporated	20,991.18	SCADA Phase 3 SPO
228470185	12/15/2022	Nationwide	19,132.15	Payroll
65307	12/30/2022	Mansfield Oil Company of Gainesvill	18,387.27	Monthly Fuel
65314	12/30/2022	Paymentus Corporation	17,406.93	Transaction Fees
65330	12/30/2022	U S Postmaster	15,000.00	Bulk Mail Permit
65179	12/15/2022	Cranium Holding Incorporated	14,600.00	BizLibrary Learning Management
65178	12/15/2022	Bank of America	12,221.73	Supls, Memb, Travel, Software
228470201	12/30/2022	Virginia Department of Taxation	12,072.75	Payroll
65339	12/30/2022	Whitman, Requardt & Assoc LLP	11,981.86	Madison Office Park
65288	12/30/2022	Core & Main LP	11,500.00	Inventory
65227	12/15/2022	Ramboll Americas Engineering	10,838.00	On-Call Sewer Rehab/Replace
228470191	12/15/2022	Virginia Department of Taxation	10,612.67	Payroll
65240	12/15/2022	Provantage LLC	9,675.00	SQL Server
65209	12/15/2022	Ryland L Holmes Jr	9,196.00	Mini-Gator
65258	12/15/2022	Cellco Partnership	7,274.12	Monthly Cellular Service
65203	12/15/2022	EWT Holdings III Corporation	6,330.29	Bioxide Delivery
65261	12/15/2022	Whitman, Requardt & Assoc LLP	6,191.40	Scottsville Phase 4 Design
65250	12/15/2022	Todd Thorpe	6,100.00	Removal of Trees
65316	12/30/2022	PFM Asset Management LLC	5,881.21	Investment Advisory Services
65199	12/15/2022	Dominion Energy Virginia	5,457.13	Monthly Energy Service
65322	12/30/2022	RSG Landscaping LLC	5,142.19	Landscaping
65310	12/30/2022	Michael Baker International Incorp	5,046.25	Bellair - Liberty Hills Sewer
228470198	12/30/2022	VALIC	4,675.00	
228470188	12/15/2022	VALIC	4,655.00	
65317	12/30/2022	The Pitney Bowes Bank Incorporate	4,000.00	
65292	12/30/2022	Dominion Energy Virginia	3,916.94	
65193	12/15/2022	County of Albemarle	3,780.03	
65293	12/30/2022	Ed's Floor Care Services LLC	3,703.33	

65260	12/15/2022	Michael Sean McGill	3,500.00
65191	12/15/2022	Consolidated Pipe & Supply	3,381.00
65228	12/15/2022	ODP Business Solutions LLC	3,221.69
228470195	12/30/2022	Nationwide	3,132.15
65219	12/15/2022	L/B Water Service Incorporated	2,826.03
65299	12/30/2022	Flora Pettit PC	2,788.00
228470194	12/30/2022	ICMA Membership Renewals	2,613.92
65220	12/15/2022	Synchrony Bank	2,556.39
228470184	12/15/2022	ICMA Membership Renewals	2,513.92
65224	12/15/2022	Mayer Electric Supply	2,437.50
65349	12/30/2022	Minnesota Life Insurance Co	2,021.79
65247	12/15/2022	St John Bowling & Lawrence PLC	1,940.00
65174	12/15/2022	American Environment &	1,900.00
65313	12/30/2022	ODP Business Solutions LLC	1,896.14
65275	12/30/2022	Brink's Incorporated	1,889.54
65255	12/15/2022	UniFirst Corporation	1,886.04
65285	12/30/2022	Clear Communication &	1,886.00
65346	12/30/2022	Guardian	1,866.38
65177	12/15/2022	Aqua Port	1,850.00
65205	12/15/2022	Ferguson US Holdings Inc	1,841.69
65222	12/15/2022	Mailing Services of Virginia	1,752.90
65276	12/30/2022	Burns & McDonnell Engineering Co	1,750.00
65331	12/30/2022	UniFirst Corporation	1,743.09
65208	12/15/2022	GAC	1,716.38
228470192	12/15/2022	Flexible Benefit	1,699.75
228470202	12/30/2022	Flexible Benefit	1,699.75
228470193	12/15/2022	ACSA Flexible Spending	1,658.72
228470203	12/30/2022	ACSA Flexible Spending	1,658.72
65259	12/15/2022	VA Utility Protection Service Inc	1,539.30
65245	12/15/2022	Rivanna Water & Sewer Authority	1,532.58
65319	12/30/2022	Rappahannock Electric Cooperative	1,470.53
65189	12/15/2022	Comcast	1,407.56
65287	12/30/2022	Comcast	1,407.56
65323	12/30/2022	S L Williamson Company Inc	1,282.72
65239	12/15/2022	Ferguson Enterprises LLC #3326	1,109.00
65171	12/15/2022	ABC Extinguishers LLC	1,073.10
65173	12/15/2022	Carsons LLC	877.85
65332	12/30/2022	University Tire & Auto	829.60
65273	12/30/2022	Aqua Air Laboratories Inc	800.00
228470187	12/30/2022	AFLAC	772.26
228470197	12/30/2022	AFLAC	772.26
65304	12/30/2022	Luck Stone Corporation	768.32
65341	12/30/2022	ACAC	752.00
65257	12/15/2022	HD Supply Facilities Maint LTD	702.19
65218	12/15/2022	LB Technology Incorporated	687.50
65291	12/30/2022	Cues Incorporated	686.64
65312	12/30/2022	Moore's Electrical & Mechanical	675.50

65348	12/30/2022	Herbert Beskin Trustee	669.00
65253	12/15/2022	Tyler Technologies Incorporated	652.00
65334	12/30/2022	VACORP	637.39
65286	12/30/2022	Comcast	633.68
65303	12/30/2022	L/B Water Service Incorporated	607.29
65295	12/30/2022	Ferguson US Holdings Inc	596.89
65272	12/30/2022	Appalachian Power	589.54
65328	12/30/2022	Tencarva Machinery Co LLC	576.40
65244	12/15/2022	Rivanna Solid Waste Authority	554.00
65249	12/15/2022	TSRC Incorporated	537.91
65194	12/15/2022	Crown Castle	530.45
65181	12/15/2022	C'Ville & Albemarle Cnty Chamber o	505.00
65315	12/30/2022	Terri Petrovits	500.00
65338	12/30/2022	Werner Gstatenbauer	500.00
65345	12/30/2022	Cincinnati Insurance Company	468.14
65263	12/15/2022	Cincinnati Insurance Company	464.07
65246	12/15/2022	SnowKnows Incorporated	454.93
65264	12/15/2022	Treasurer of Virginia	430.90
65353	12/30/2022	Treasurer of Virginia	430.90
65243	12/15/2022	Republic Services	414.57
65306	12/30/2022	Mailing Services of Virginia	400.10
65176	12/15/2022	Aqua Air Laboratories Inc	400.00
65238	12/15/2022	Pitney Bowes Inc.	396.05
65172	12/15/2022	Advance Stores Company Inc	390.31
65290	12/30/2022	Courtney Crivaro	350.12
65329	12/30/2022	TSRC Incorporated	345.26
65226	12/15/2022	Emily Niziolek	325.00
65262	12/15/2022	William A Wells	315.00
65270	12/30/2022	Advance Stores Company Inc	309.33
65311	12/30/2022	Miles Lankford	300.00
65254	12/15/2022	U. S. Bank	291.67
65320	12/30/2022	Ricoh USA Incorporated	275.00
65294	12/30/2022	FedEx	270.62
65333	12/30/2022	HD Supply Facilities Maint LTD	260.80
65350	12/30/2022	Piedmont Family YMCA	257.40
65302	12/30/2022	Wisconsin Quick Lube Inc	253.69
65175	12/15/2022	American Pest Incorporated	253.00
65326	12/30/2022	Macro Retailing LLC	251.98
65201	12/15/2022	Electronic Systems Incorporated	210.00
65232	12/15/2022	Martha Clark	200.00
65234	12/15/2022	Richard Cruz	200.00
65280	12/30/2022	MWP Supply Incorporated	199.99
65351	12/30/2022	Snap Fitness	199.80
65182	12/15/2022	Capital Lighting & Supply LLC	194.02
65170	12/06/2022	Lendmark Financial Services	192.27
65188	12/15/2022	Comcast	189.85
65336	12/30/2022	Protocol SSD Corporation	188.62

65242	12/15/2022	Red Wing Business Advantage Accoi	188.59
65325	12/30/2022	The Sherwin Williams Company	188.26
65195	12/15/2022	Harris Systems USA Incorporated	180.00
65327	12/30/2022	Lisa Symms	172.70
65204	12/15/2022	FedEx Freight Incorporated	172.06
65202	12/15/2022	Craig Evans	171.27
65214	12/15/2022	James River Communications Inc	159.00
65298	12/30/2022	Flexible Benefit Administrators Inc	153.25
65265	12/15/2022	Virginia Department	150.00
65354	12/30/2022	Virginia Department	150.00
65318	12/30/2022	W & H Resources Incorporated	149.00
65340	12/30/2022	William A Wells	140.00
65274	12/30/2022	Blue Ridge Farmers Co-op	133.95
65347	12/30/2022	The Gym	130.00
65278	12/30/2022	Catherine Caldwell	129.62
65252	12/15/2022	Traffic Safety Supplies LLC	126.00
65268	12/30/2022	Foothill Lawn Service Inc	125.00
65267	12/22/2022	Virginia Dept of Transportation	120.00
65217	12/15/2022	Thomas & Sally Johnston	116.57
65237	12/15/2022	Jordan Pierson	116.36
65284	12/30/2022	City of Charlottesville	111.26
65266	12/22/2022	Virginia Dept of Transportation	110.00
65223	12/15/2022	Mansfield Oil Company of Gainesvill	107.75
65324	12/30/2022	Jessica Shein	102.21
65231	12/15/2022	James Simmons	100.00
65233	12/15/2022	Mary Dreelin	100.00
65196	12/15/2022	Steven Davis	95.06
65236	12/15/2022	Performance Signs LLC	92.00
65212	12/15/2022	Hathaway Solutions LLC	88.89
65206	12/15/2022	FFC Properties LLC	83.88
65241	12/15/2022	Quality Welding Inc.	74.57
65198	12/15/2022	Document Destruction of	69.95
65296	12/30/2022	Fisher Auto Parts Incorporated	63.82
65309	12/30/2022	Mayer Electric Supply	61.81
65207	12/15/2022	Fortiline Incorporated	58.32
65186	12/15/2022	C.E.S (City Electric Accounts - Chi)	57.88
65221	12/15/2022	Luck Stone Corporation	50.09
65211	12/15/2022	Harry A Wright's Incorporated	50.00
65335	12/30/2022	Virginia Government Finance	50.00
65180	12/15/2022	Blue Ridge Farmers Co-op	49.98
65215	12/15/2022	Wisconsin Quick Lube Inc	45.41
65213	12/15/2022	Hawkins-Graves Incorporated	44.59
65216	12/15/2022	Price Chevrolet Company	40.00
65342	12/30/2022	Anytime Fitness-Pantops	40.00
65343	12/30/2022	Anytime Fitness-Ruckersville	40.00
65344	12/30/2022	Anytime Fitness - Zion VA	40.00
65352	12/30/2022	Snap Fitness Hollymead	39.96

65282	12/30/2022	Charlottesville Sanitary	36.95
65184	12/15/2022	Central Virginia Electric Cooperative	33.29
65185	12/15/2022	Charlottesville Sanitary	32.12
65248	12/15/2022	Arthur Symmes	30.86
65187	12/15/2022	City of Charlottesville	30.06
65269	12/30/2022	ABC Extinguishers LLC	30.00
65230	12/15/2022	Deborah Herr	24.26
65300	12/30/2022	Gingerich Outdoor Power Spec	23.99
65256	12/15/2022	University Tire & Auto	20.00
65183	12/15/2022	MWP Supply Incorporated	16.49
65297	12/30/2022	Danielle Flagg	15.42
65235	12/15/2022	One Hundred LLC	15.02
65271	12/30/2022	BPB Holding Corporation	14.75
65321	12/30/2022	Rio Ivy Cleaners	13.80
65279	12/30/2022	Capital Lighting & Supply LLC	10.11
65229	12/15/2022	Albemarle County Circuit Court	10.00
65281	12/30/2022	Rita D Carman	9.53
65225	12/15/2022	Deborah Morris	9.45
65301	12/30/2022	Gregory Glennon	9.14
65289	12/30/2022	County of Albemarle	9.06
65283	12/30/2022	BRC Enterprises Incorporated	7.28
65251	12/15/2022	Thryv Incorporated	6.50
65308	12/30/2022	Martin Hardware Company Inc	5.98
65277	12/30/2022	Sara Caddell	4.58
			3,365,240.09

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2023 Capital Improvement Program (CIP)	AGENDA DATE: January 19, 2023
STAFF CONTACT(S)/PREPARER: Jeremy M. Lynn, P.E., Director of Engineering	CONSENT AGENDA: ACTION: ■ INFORMATION: ■ ATTACHMENTS: YES

BACKGROUND: Monthly CIP Memo including a status report on active CIP Projects, 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 four 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
January 2023

a) Risk Assessment Improvements Phase 1 (Account Code 1621):

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	10%
Contractor:	Harrisonburg Construction Co., Inc. (HCC)
Construction Start:	November 2022
Completion:	April 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.

1/10/2023: HCC's subcontractor has completed installation of security film at the Administration and Maintenance Buildings, and the Glenmore Sewer Pump Station.

b) 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.

c) Avon Street Maintenance Yard (Account Code 1622):

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	80%
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.

1/10/2023: Comments on the Site Plan have been received from the County and Dewberry is working to address them. ACSA staff is working with Dominion Energy on the costs and easement to facilitate the relocation of a power pole.

d) Four-Story Backflow Prevention Assembly Retrofit (Account Code 1765):

Consultant:	ACSA/Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	0%
Contractor:	Foothill Irrigation (Phase 1)
Construction Start:	2023

Completion:	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.

1/10/2023: One Proposal was received from Foothill Irrigation and ACSA staff is working with them to establish a schedule for Phase 1.

e) 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. The design will begin in FY 2019 and carry over into FY 2020. Construction is not anticipated to begin until FY 2025.

11/7/2022: The SWPPP and VSMP application has been submitted to the County for review. The 90% Design Documents are currently under review by ACSA staff. Easement plat preparation is also underway.

f) 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:	\$520,911

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.

1/10/2023: ACSA staff is working to obtain the final easement; to date 17 of 18 easements required for construction have been obtained. The final easement may require condemnation by the ACSA Board. A Board Authorization is proposed for this project.

g) 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:	2023
Completion:	2023
Total Budget:	\$951,400
Appropriated Funds:	\$124,975

Project Description - This project will replace the oldest active water main remaining in our system, which was part of the water main that served customers out Reservoir Road. This cast iron pipe is over 90 years old and is severely tuberculated, which greatly reduces the flow capacity in this section.

12/5/2022: VDOT recently advised that the Morey Creek Bridge Replacement Project is no longer active as funding is not available to proceed with construction. ACSA staff is exploring other feasible alternatives with Dewberry as the current water main replacement design was dependent on this bridge work.

h) Jefferson Village Water Main Replacement (Account Code 1747):

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Construction
Percent Complete:	85%
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.

1/10/2023: All asbestos cement water mains in the neighborhood have been abandoned, leaving only the lines along Proffit Road and Jefferson Court still in service. CEI is scheduled to perform the connection into the Terrybrook subdivision on 1/10/2023 and the connection into the existing water main along Proffit Road on 1/17/2023. Water services along Jefferson Court remain to be switched to the new main.



i) Northfields Water Main Replacement (Account Code 1764):

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Design
Percent Complete:	50%
Contractor:	Undetermined
Construction Start:	2025
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.

11/7/2022: The Letter of Agreement for the additional pavement restoration associated with geotechnical borings has been sent to Ramboll

j) Briarwood Water Main Replacement (Account Code 1766):

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Design
Percent Complete:	50%
Contractor:	Undetermined
Construction Start:	2025
Completion:	2026
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. The design phase has been initiated and will carry over into FY 2023. Construction is expected to take place in FY 2025 and FY 2026.

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

k) Barracks West Water Main Replacement (Account Code 1796):

Consultant:	Dewberry Engineers, Inc. (Dewberry)
Project Status:	Design
Percent Complete:	50%

Contractor:	Undetermined
Construction Start:	2025
Completion:	2026
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.

l) 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:	2023
Total Budget:	\$792,800
Appropriated Funds:	\$99,820

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.

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

Consultant:	Michael Baker International, Inc. (Baker)
Project Status:	Design
Percent Complete:	25%
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.

9/7/2022: Baker has received the field survey information and is working on the 50% Design Documents.

n) 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.

1/10/2023: ACSA staff continues to make efforts to obtain the necessary easements for construction of this replacement sewer. To date, 8 of 24 easements have been obtained.

o) Biscuit Run Sewer Replacement (Account Code 1830):

Consultant:	OBG, A Ramboll Company (Ramboll)
Project Status:	Design
Percent Complete:	100%
Contractor:	Linco, Inc. (Linco)

Construction Start:	2022
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.

12/5/2022: Approval from DEQ has been received, allowing construction to begin. ACSA staff is awaiting a schedule from Linco.

p) 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.

q) 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.

11/7/2022: Work Order No. 3 has been issued and includes manhole rehabilitation and the relining of approximately 2,000 linear feet of sanitary sewer mains.

r) 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.

10/10/2022: Baker has submitted the 50% Design Documents and they are currently under review by ACSA staff.

s) 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.

t) Sewer Pump Station Comminutors (Account Code 1827):

Consultant:	Whitman, Requardt & Associates, Inc. (WRA)
Project Status:	Construction
Percent Complete:	0%
Contractor:	East Coast Utility Contractors, Ltd. (ECUC)
Construction Start:	July 2022
Completion:	March 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.

1/10/2023: ECUC has received the concrete tops and grinders and is scheduled to mobilize before the end of January 2023.

u) **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.

1/10/2023: The Lewis Hill HOA has responded to the ACSA indicating their unwillingness to grant the necessary easements. ACSA staff is seeking legal guidance on possible alternative options, including reuse of an existing easement.

v) **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.

w) Exclusion Meters Replacement (Account Code 1759):

Consultant:	ACSA Engineering Department
Project Status:	Construction
Percent Complete:	31%
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.

1/10/2023: 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 342 exclusion meters remaining in our system.

x) Woodbrook Force Main Replacement Project (Account Code 1826):

Consultant:	ACSA Engineering Department
Project Status:	Construction
Percent Complete:	0%
Contractor:	Linco, Inc. (Linco)
Construction Start:	2022
Completion:	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.

11/7/2022: A Work Order under our FY 2022 Miscellaneous Sewer Repair/Replacement Contract was issued to Linco on October 26, 2022. VDOT has advised that repaving along Idlewood Drive is anticipated in 2023, so this will drive our schedule for replacement.

y) 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.

11/7/2022: M.C. Dean has begun providing submittals for review by WRA.

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

1. The design phase of the Energy Audit has been extended to January 2023.
2. The design phase of the Ragged Mountain Phase 1 Water Main Replacement Project has been extended to March 2023.
3. The design phase of the Northfields Water Main Replacement Project has been extended to April 2023.
4. The start of the design phase of the Townwood Water Main Replacement Project has been shifted to February 2023.

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

- a. Albemarle Business Campus – Block 1 (Scottsville): Water and sewer main extension 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 extension 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 extension to serve 65 residential units. This project is located along Scottsville Road, south of Mountain View Elementary.
- f. Georgetown Hydraulic (Jack Jouett): Water main extension to serve a commercial office building at the intersection of Georgetown Road and Hydraulic Road.
- g. 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.
- h. 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.
- i. Old Trail Village Block 7C (White Hall): Water and sewer main extensions to serve 30 residential units. This project is located along Old Trail Drive near Golf View Drive.

- 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 extension 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 extension 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.
- r. Umansky Subaru of Charlottesville – Major Amendment (Rio): Water main relocation to facilitate the proposed building expansion of the Umansky Subaru. The project is located to the east of Walmart, along Hilton Heights Road.

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: FY 2023 CIP Authorizations	AGENDA DATE: January 19, 2023
STAFF CONTACT(S)/PREPARER: Jeremy M. Lynn, P.E., Director of Engineering	ACTION: <input type="checkbox"/> INFORMATION: <input type="checkbox"/>
	CONSENT AGENDA:
	ACTION: <input checked="" type="checkbox"/> INFORMATION: <input type="checkbox"/>
	ATTACHMENTS: YES

BACKGROUND: Authorization for three CIP Projects, two of which have been included in the CIP Rate Model Budget. The first authorization is the funding for the replacement of ACSA's Water Modeling Software. The second authorization is the funding to cover bid and construction phase services for the Crozet Phase 4 Water Main Replacement Project. The third authorization is the funding to cover bid and construction phase services for the Broadway Street Water Main Replacement Project.

DISCUSSION:

- ❖ Allows ACSA staff to purchase replacement water modeling software to be more compatible with our community partners.
- ❖ Provides ACSA staff with professional expertise of our term contract consultants during bid and construction phases for both the Crozet Phase 4 and Broadway Street Water Main Replacement Projects.
- ❖ Continues our Strategic Plan efforts to replace all asbestos-cement pipe material and upgrade undersized mains in our water system.

BUDGET IMPACT: The cost of the Water System Modeling Software Replacement was not anticipated in the FY 2023 CIP Budget but will be offset by cost savings on other CIP projects. The costs of Bid and Construction Phase Services for both the Crozet Phase 4 and Broadway Street Water Main Replacement Projects will be within the amount budgeted in the CIP Rate Model.

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

BOARD ACTION REQUESTED: Approve the Consent Agenda.

ATTACHMENTS:

- ❖ Detailed memo of the proposed CIP authorizations.
- ❖ Quote from Bentley for purchase of replacement Water System Hydraulic Modeling Software.

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

- ❖ Proposal from Michael Baker International for Bid and Construction Phase Services for the Crozet Phase 4 Water Main Replacement Project.
- ❖ Proposal from Whitman, Requardt & Associates for Bid and Construction Phase Services for the Broadway Street Water Main Replacement Project.



MEMORANDUM

To: Board of Directors
From: Jeremy M. Lynn, P.E., Director of Engineering
Date: January 19, 2023
Re: FY 2023 CIP Authorizations
cc: Michael E. Derdeyn

The following projects require Board authorization:

- A. Water System Modeling Software Replacement:** The current water modeling software, InfoWorks WSPPro, has been utilized by the Engineering Department for more than 15 years. More recently, our community utility partners (RWSA and the City of Charlottesville) have developed hydraulic models utilizing Bentley's WaterGEMS Hydraulic Modeling Software, which is significantly different from the ACSA's current modeling software. To be more compatible with the modeling efforts of our utility partners, and to ensure more consistent support from our Engineering Term Contract Consultants, ACSA staff is seeking to replace the current InfoWorks WSPPro software with WaterGEMS. Attached is a Quote from Bentley summarizing the costs totaling \$39,298.52.

Board Action

We request the Board of Directors appropriate \$39,298.52 for procurement of the WaterGEMS Unlimited Pipes Perpetual License from the FY 2023 3R Fund.

- B. Crozet Phase 4 Water Main Replacement Project:** Our consultant, Michael Baker International, Inc. (Baker) is finalizing the design of the Crozet Phase 4 Water Main Replacement Project and ACSA is planning to advertise for bids soon. ACSA has developed a Scope of Services for Bid & Construction Phase Services for this project. Attached is a letter dated January 9, 2023, from Baker with their fee proposal for providing these services. The ACSA staff has reviewed this proposed fee and finds it satisfactory. The estimated cost for Bid & Construction Phase Services is \$67,245.

Board Action

We request the Board of Directors appropriate \$67,245 from the FY 2023 3R Fund for Bid and Construction Phase Services for the Crozet Phase 4 Water Main Replacement Project.

- C. Broadway Street Water Main Replacement Project:** Our consultant, Whitman, Requardt and Associates (WRA) is nearing completion of the design of the Broadway Street Water Main Replacement Project. ACSA has developed a Scope of Services for Bid & Construction Phase Services for the Broadway Street Water Main Replacement Project. Attached is a letter dated January 6, 2023, from WRA with their fee proposal for providing these services. The ACSA staff has reviewed this proposed fee and finds it satisfactory. The estimated cost for Bid & Construction Phase Services is \$28,180.

Board Action

We request the Board of Directors appropriate \$28,180 from the FY 2023 3R Fund for Bid & Construction Phase Services for the Broadway Street Water Main Replacement Project.

JML/jml

Attachments

010101CIPAuthorizations01192023

Quote

91

Quote Number:	177890
Quote Date:	Jan 10, 2023
Quote Valid Until Date:	Mar 9, 2023
Customer ID:	1006756350
Number of Pages:	1 of 2

Ship-To: Albemarle County Service Authority

168 Spotnap Road
Charlottesville VA 22911 United States

Tel No: +1 434-977-4511
Fax No:

Bill-To: Albemarle County Service Authority

168 Spotnap Road
Charlottesville VA 22911 United States

Tel No: +1 434-977-4511
Fax No:

All pricing on this quote is based on GSA Contract 47QTCA21D00DN (unless otherwise noted). Please reference the GSA contract on your purchase order to ensure acceptance. If your organization is a subscriber to Bentley SELECT, the pricing listed on this page of the quote is prorated to the end of your current billing cycle. If applicable, future invoices will be generated based on the billing cycle shown on the following pages. The total from this first section of the quote is your immediate purchase value.

Products

No.	Part # / Description	Qty.	Unit Pricing	Total
10	10007822 - OpenFlows WaterGEMS Unlimited Pipes PL	1	Gross Value 31,563.93 USD Discount 0.00 USD Net Price 31,563.93 USD	31,563.93 USD
20	10003051 - OpenFlows WaterGEMS Unlimited Pipes SELE Subscription Period 10 Mar 2023 Through 09 Mar 2024	1	Gross Value 7,734.59 USD Discount 0.00 USD Net Price 7,734.59 USD	7,734.59 USD
Total of Immediate Purchase:				39,298.52 USD
Grand Total of Quote (over life of contract):				39,298.52 USD

**Prices shown on this quotation exclude applicable taxes. Applicable taxes will be included on invoices. If your account is exempt from standard taxes, please provide supporting documentation with your order.



Quote

Quote Number:	177890
Quote Date:	Jan 10, 2023
Quote Valid Until Date:	Mar 9, 2023
Customer ID:	1006756350
Number of Pages:	2 of 2

Export Control:

You acknowledge that these commodities, technology or software are subject to the export control laws, rules, regulations, restrictions and national security controls of the United States and other agencies or authorities based outside of the United States (the 'Export Controls').

You must not export, re-export or transfer, whether directly or indirectly, the commodities, technology or software, or any portion thereof, or any system containing such commodities, technology or software or portion thereof, without first complying strictly and fully with all Export Controls that may be imposed on them.

The countries subject to restriction by action of the United States Government or any other governmental agency or authority based outside of the United States, are subject to change, and it is your responsibility to comply with the applicable United States Government requirements, or those of any other governmental agency or authority based outside of the United States, as they may be amended from time to time. For additional information, see <http://www.bis.doc.gov>

Bentley is subject to the United States Department of the Treasury Office of Foreign Assets Control (OFAC) Sanctions Programs regulations. Those regulations require Bentley not engage in transactions (1) with designated persons and entities set forth on OFAC's Specially Designated Nationals List ("SDN List"), see <http://www.treasury.gov/ofac/downloads/ctrylst.txt> or (2) where a customer intends to finance a purchase of Bentley software and/or technology through new debt or equity by or for entities identified on OFAC's Sectoral Sanctions Identifications List ("SSI List"), see http://www.treasury.gov/ofac/downloads/ssi/ssi_ctryls.txt. Accordingly, Bentley will not engage in such transactions.

Note:

Pricing is only applicable to the products and quantities contained within this quote and may not be applied to a subset of the quotation.

By signing this Quotation, you agree that your SELECT Program subscription shall be governed by the SELECT Program Agreement, the terms and conditions of which can be found at <https://www.bentley.com/legal/select-program-agreement>.

Any additional or different terms or conditions appearing on your purchase order, even if Bentley acknowledges such terms and conditions, shall not be binding on the parties unless both parties agree in a separate written agreement.

Your payment term shall be: 30 days net

If you would like us to bill this quote against a Purchase Order, please indicate the purchase order number below and attach a copy with your acceptance of this quote.

☐ Please bill against PO# _____

☐ Purchase Order is not required. We will accept Bentley's invoice on the basis of this signed quote.

Agreed and accepted by:

(Subscriber's Signature)

(Subscriber's Name)

(Title)

(Date)

Bentley Contact:

Name: Jeffrey Hill

Phone: +1 610-458-5000

Fax:

January 9, 2023

Mr. Justin Weiler, PE
 Albemarle County Service Authority
 168 Spotnap Road
 Charlottesville, VA 22911-8690

Transmitted electronically to:
jweiler@serviceauthority.org

RE: Crozet Phase 4 Water Main Replacement Project
 Bid and Construction Phase Services

Dear Mr. Weiler:

Pursuant to your request, Michael Baker International, Inc. (Michael Baker) is pleased to provide our Labor and Cost Breakdown spreadsheet to accompany the Scope of Services provided by the Albemarle County Service Authority (ACSA), dated December 21, 2022, as modified herein. Michael Baker's proposal consists of the following components:

Bid Phase Services	\$ 21,035.00
Construction Phase Services	\$ 30,240.00
<u>Record Drawings</u>	<u>\$ 15,970.00</u>
Total Services (Not to Exceed)	\$ 67,245.00

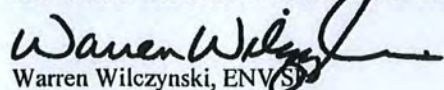
In addition to the Scope of Services outlined by ACSA, Michael Baker offers the following clarifications:

1. Bid Phase Services will include preparation of Pre-Bid Meeting Agenda and Meeting Summary.
2. Construction Phase Services will include plan revision(s) as required.
3. Four (4) full size sets of final documents (plans and specifications), and one (1) half size set of plans only, will be provided.
4. Additional paper sets of final construction documents can be provided to contractors if required, at a unit cost of \$80.00 per set plus the cost of delivery, paid directly to Michael Baker.
5. Access to an FTP site for contractor's to download the plans and specifications can be provided free of charge, unless otherwise directed by ACSA.

The Program Manager for this work will be Gary Heisler (757-631-5404), and the Project Engineer will be Warren Wilczynski (757-631-5451). Upon execution, please issue to us a formal Letter of Agreement. If you have any questions or need additional information, please do not hesitate to contact us. As always, we thank you for this opportunity to provide engineering services to the Albemarle County Service Authority.

Sincerely yours,

MICHAEL BAKER INTERNATIONAL, INC.



Warren Wilczynski, ENV S
 Associate | Technical Specialist

Enclosures : as noted

cc: Gary Heisler, PE (Baker)
 Project File

**ALBEMARLE COUNTY SERVICE AUTHORITY
CROZET PHASE 4 WATER MAIN REPLACEMENT PROJECT**

SCOPE OF SERVICES

I. GENERAL

The scope of services prepared by the Albemarle County Service Authority (ACSA) generally consists of Bid and Construction Phase Services for the Crozet Phase 4 Water Main Replacement Project. Michael Baker International (Baker) will provide the following services:

II. BID PHASE SERVICES

The Bid Phase services require that Baker shall:

1. Attend one (1) pre-bid meeting.
2. Provide clarifications to technical questions.
3. Prepare drawing and specification addenda as required.
4. Provide 4 full size sets and 1 half size set of final construction documents to ACSA. Baker will provide access to an ftp site for contractors to download the plans and specifications upon payment of bid sets.
5. Evaluate the bids and make recommendation to ACSA.

III. CONSTRUCTION PHASE SERVICES

The Construction Phase services shall include the following:

1. Provide as needed services to answer questions, provide interpretation and attend meetings.
2. Provide CADD services to prepare record drawings based on legible copies of the contractor's and ACSA inspector's field mark-up drawings. One (1) copy of a Record Drawing set of paper and one (1) digital pdf for the project will be provided to the ACSA. The Record Drawing set shall represent the contractor's and ACSA's comments and project conditions as constructed.

Crozet Phase 4 Water Main Replacement Project
 Bid and Construction Phase Services
 Albemarle County Service Authority
 January 9, 2023

Michael Baker
INTERNATIONAL
 272 Bendix Road, Suite 400
 Virginia Beach, VA 23452

TASK	LABOR CLASSIFICATIONS				TOTAL (HRS)	DIRECT EXPENSES (\$)	COST PER TASK (\$)
	Program Mgr. \$ 215.00 (HRS)	Project Engineer \$ 160.00 (HRS)	CADD Technician \$ 95.00 (HRS)	Clerical \$ 75.00 (HRS)			
BID PHASE SERVICES							
Attend Pre-Bid Meeting (assume 1, See Note 1)	6	16			22	\$ 250.00	\$ 4,100.00
Provide Clarifications to Technical Questions	4	16	8		28	\$ -	\$ 4,180.00
Prepare Drawing and Specification Addenda	4	24	20	8	56	\$ 25.00	\$ 7,225.00
Provide 5 Sets of Final Documents (See Notes 2 & 3)		4	8	8	20	\$ 450.00	\$ 2,450.00
Evaluate Bids and Make Award Recommendation	4	12		4	20	\$ -	\$ 3,080.00
SUB-TOTAL	\$ 3,870.00	\$ 11,520.00	\$ 3,420.00	\$ 1,500.00	146	\$ 725.00	\$ 21,035.00
CONSTRUCTION PHASE SERVICES							
Respond to Questions	12	48	8	4	72	\$ 50.00	\$ 11,370.00
Provide Interpretation (See Note 4)	12	48	12	2	74	\$ -	\$ 11,550.00
Attend Meetings (assume 3)	12	24		2	38	\$ 750.00	\$ 7,320.00
SUB-TOTAL	\$ 7,740.00	\$ 19,200.00	\$ 1,900.00	\$ 600.00	184	\$ 800.00	\$ 30,240.00
RECORD DRAWINGS							
Prepare Record Drawings	10	32	90		132	\$ 150.00	\$ 15,970.00
SUB-TOTAL	\$ 2,150.00	\$ 5,120.00	\$ 8,550.00	\$ -	132	\$ 150.00	\$ 15,970.00
TOTALS					462	\$ 1,675.00	\$ 67,245.00

NOTES

1. Bid Phase Services will include preparation of Pre-Bid Meeting Agenda and Meeting Summary.
2. Additional paper sets of final construction documents can be provided to contractors if required, at a unit cost of \$80.00 per set plus the cost of delivery, paid directly to Michael Baker.
3. Michael Baker will provide an FTP link for individual Contractors to download the plans and specifications, when directed by the ACSA.
4. Construction Phase Services will include plan revision(s) as required.



January 6, 2023

Mr. Richard Nelson
Civil Engineer
Albemarle County Service Authority
168 Spotnap Road
Charlottesville, Va. 22911

Re: Broadway Street Water Main Replacement Project – Engineering Services Proposal for Bid and Construction Phase Services

Dear Mr. Nelson:

Whitman, Requardt and Associates, LLP (WRA) is submitting this proposal to provide bid and construction phase services for the Broadway Street Water Main Replacement Project as requested by the Albemarle County Service Authority (ACSA). This proposal is based on the bid and construction phase services scope document provided by the ACSA for the project.

The project is currently in the final design and submittal stage, with geotechnical borings, test holes, and final design plan approval tasks remaining to be performed prior to project advertisement.

The following subsections summarize the scope of services for the bid and construction phases for the project.

BID PHASE SERVICES

The Bid Phase services for the project will include the following tasks:

1. Conduct one (1) pre-bid meeting and issue meeting minutes.
2. Provide clarifications to technical questions.
3. Prepare two (2) addenda, as required.
4. Provide 5 sets of final construction documents to ACSA and electronic sets provided to select plan rooms. Additional sets will be provided at a unit cost, based on printing costs.
5. Provide a secure file sharing site and log-in to allow for direct contract document download by prospective bidders, if requested by the ACSA.
6. Evaluate the bids and make recommendation of award to the ACSA.

For the Bid Phase Services portion of the project scope, the following assumptions have been made:

1. The pre-bid meeting will be held through a virtual meeting platform.
2. The project is anticipated to be bid as a single, standalone project as shown in the current design documents.
3. Prequalification of contractors is not required or anticipated.

CONSTRUCTION PHASE SERVICES

WRA proposes the following scope for construction administration services:

1. As Needed Services

The services under this task will include responding to questions, providing interpretation to contract document requirements, and providing necessary engineering assistance to the ACSA throughout construction. Services under this task will not be performed unless authorized by the ACSA.

For the purposes of this proposal, the estimated fee for this task is based on the following work efforts and assumptions:

- A. Pre-Construction and Progress Meetings – WRA will attend up to 3 project meetings for the project following contract award by the ACSA and as requested by the ACSA. WRA will attend the project meetings at the ACSA's office or other suitable location. WRA estimates a total of six (6) hours for the 3 total meetings under this task, which includes time for meeting minute preparation and distribution.
 - B. File Transfer to Contractor – WRA will prepare and transmit the requested electronic files to the contractor if needed. This task involves the coordination of an electronic file usage agreement with the contractor and any subcontractors using the transmitted files.
 - C. Submittal Review – For the purposes of this proposal, WRA estimates that a total of four (4) submittals will be required for initial review by WRA. WRA estimates a total of four (4) hours for review of each submittal review.
 - D. Requests for Information (RFI's) – For the purposes of this proposal, WRA estimates a total of three (3) RFI's will be submitted for review and response. A total of three (3) hours are estimated for review and response to each RFI.
 - E. Change Order Request Review – WRA estimates that a total of two (2) change order requests will require review. A total of eight (8) hours are estimated for the review and response to each change order request.
2. Record Drawings – For this task, WRA will prepare record drawings for the project. The record drawings will be prepared in Autocad format and submitted to the ACSA in hardcopy and pdf format. The record drawings will be prepared based on markups provided by the contractor and the ACSA inspector. For the purposes of this proposal, WRA estimates four (4) hours per plan sheet will be needed to complete the record drawings for the project. The estimated fee for this task is based on the current (90%) design plan set (9 sheets).
 3. CADD Drawings and Files to the ACSA – Under this task, WRA will finalize the cadd drawings for the project and prepare the necessary transmittal to the ACSA. It is anticipated that this task will occur following the completion of the record drawings.

For the Construction Phase Services portion of the project scope, the following assumptions have been made:

1. Conformed contract documents or additional contract document sets for distribution to the contractor or for permit applications are not included or anticipated.
2. WRA will attend the progress meetings when requested by the ACSA.
3. For each of the two estimated change order requests, WRA will provide a response for each draft change order to the ACSA for review prior to change order issuance. The ACSA will issue the executed change orders to the contractor and provide WRA with fully executed copies.
4. The ACSA will perform general contract administration services, including the review and approval of all pay applications.
5. The ACSA will perform inspections on the project. No supplemental inspection services are included or proposed.
6. Substantial and final completion reviews of the completed project are not included. It is assumed the ACSA will perform these tasks.
7. The contractor or the ACSA will provide markups to WRA to be used for the record drawing development.

COMPENSATION

Attachment A contains the fee summary for the project. The estimated, not-to-exceed fee is based on hourly rates in Attachment A and is summarized as follows:

Task	Estimated Fee
Bid Phase Services	\$9,824.00
Construction Phase Services	\$18,353.90
Total Fee (rounded)	\$28,180



Mr. Richard Nelson
Albemarle County Service Authority

Page 3
January 6, 2023

WRA trusts that this proposal and fee summary addresses the scope items needed to assist the ACSA in the bid and construction phases for the Broadway Street Water Main Replacement Project.

Please let us know if you wish to discuss the proposal in greater detail or if you have any questions or concerns. Thank you for your continued cooperation and support on this important project.

Very truly yours,

Whitman, Requardt and Associates, LLP



Charles Luck, P.E.
Vice President

Enclosures

cc: Jeremy Lynn – ACSA
File 46480-028



Attachment A

Fee Estimate

Broadway Street Water Main Replacement Project
Albemarle County Service Authority

TASK	LABOR CLASSIFICATIONS (HOURS WITH HOURLY RATES)					TOTAL (HRS)	DIRECT EXPENSES (\$)	COST PER TASK (with 2.55 mult.) (\$)
	Project Manager HRS @ \$84.00	Sr. Proj. Engineer HRS @ \$72.00	Design Engineer HRS @ \$62.00	Senior Designer HRS @ \$55.00	CADD Technician HRS @ \$48.00			
BID PHASE SERVICES								
Conduct Pre-Bid Meeting	4.00		4.00			8.00		\$1,489.20
Prepare Addenda (2 assumed)	2.00	8.00	12.00		10.00	32.00	\$200.00	\$5,218.40
Provide 5 sets of Final Documents ¹ and electronic sets to select plan rooms.				4.00	4.00	8.00	\$750.00	\$1,800.60
Evaluate Bids and Make Recommendation		2.00	6.00			8.00		\$1,315.80
SUB-TOTAL HOURS	6.00	10.00	22.00	4.00	14.00	56.00		
SUB-TOTAL DOLLARS	\$504.00	\$720.00	\$1,364.00	\$220.00	\$672.00	\$3,480.00	\$950.00	\$9,824.00
CONSTRUCTION PHASE SERVICES								
1. As Needed Services (when requested by the ACSA)								
Pre-Construction and Progress Meetings - 3 total meetings	18.00					18.00		\$3,855.60
File Transfer to Contractor					10.00	10.00		\$1,224.00
Shop Drawing Review - 4 submittals @ 4 hrs each			8.00	8.00		16.00	\$50.00	\$2,436.80
Requests for Information (RFIs) - 3 estimated @ 3 hrs each		9.00				9.00		\$1,652.40
Change Order Request Review - 2 estimated @ 8 hrs each	8.00	8.00				16.00		\$3,182.40
2. Record Drawings (9 sheets @ 4 hours/sheet)	4.00			14.00	18.00	36.00		\$5,023.50
3. CADD Drawings and Files to the ACSA					8.00	8.00		\$979.20
SUB-TOTAL HOURS	30.00	17.00	8.00	22.00	36.00	113.00		
SUB-TOTAL DOLLARS	\$2,520.00	\$1,224.00	\$496.00	\$1,210.00	\$1,728.00	\$7,178.00	\$50.00	\$18,353.90

TOTAL HOURS	169.00		
TOTAL DOLLARS	\$10,658.00	\$1,000.00	\$28,177.90
TOTAL DOLLARS WITH 2.55 MULTIPLIER	\$27,177.90		
TOTAL ESTIMATED FEE	\$28,177.90		
TOTAL FEE (ROUNDED)	\$28,180.00		

Assumptions:

¹ 5 sets of contract documents to be provided to the ACSA, with electronic sets of contract documents provided to plan rooms. Additional sets of contract documents will be provided at a unit cost established by printing costs.

AGENDA ITEM EXECUTIVE SUMMARY

CONSENT AGENDA

AGENDA TITLE: Sewer Line Inspections	AGENDA DATE: January 19, 2022
STAFF CONTACT(S)/PREPARER: Roland Bega & Robbie Lawson, Operations Supervisors	ACTION: Informational ATTACHMENTS: Yes

BACKGROUND: Constant sewer line inspections allow the CCTV Technicians to proactively find issues before they turn into emergencies along the 315-mile ACSA network .

DISCUSSION:

The CCTV Technicians initiate the sewer line inspections on a continuous basis. Sewer line inspections take approximately two years to complete for the entire ACSA system. Areas are self-assigned by the CCTV Technicians based on a Granite computer program that populates our ACSA map with red lines overlaid on sewer lines that have been inspected earlier in the year (Attachment 1). Remaining sewer lines that haven't been inspected are easily identified on the map. The two ACSA CCTV vans are assigned roughly equal service areas in the ACSA network. Other areas that receive attention are those that have a history of grease issues. These areas need to be inspected more frequently to prevent clogged sewer lines.

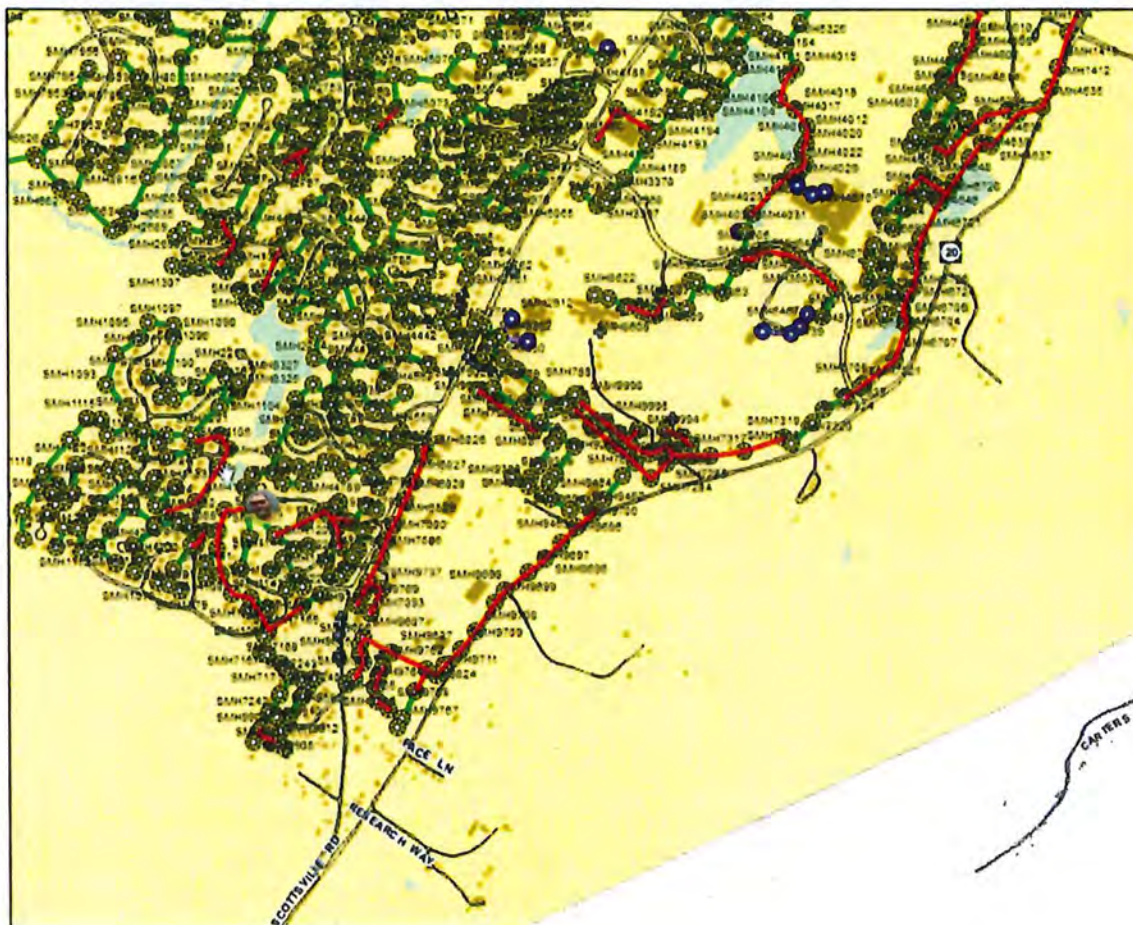
CCTV allows the opportunity to see a variety of issues in the sewer lines, including gravel or rocks in the lines, mud in the lines and construction debris. Some of the greatest threats to established sewer lines involve grease, roots (Attachment 2), broken pipes, inflow and infiltration (I&I).

Accumulated grease is a man-made condition that can constrict or even block wastewater flow in the pipes. Fortunately, routine sewer inspections can keep grease from causing serious problems. Inspections also provide an investigative element. By following the evidence of the grease coating the sides of the pipes upstream (Attachment 3), the source of the grease can be discovered. Often the source of the grease can be found coming from establishments such as restaurants or apartment complexes. Once this has been determined, the Fat, Oil and Grease (FOG) team in the Engineering Department is tasked with compliance. This usually ranges from inspecting grease traps in the business to having a contractor flush the sewer lines at the owner's expense.

Customers call in about 20 times a year, reporting sewer smell, sewer backups in their homes or businesses and overflowing manholes. Preventative sewer line inspections keep these calls to a minimum, which reduces overtime expenses and customer complaints.

BOARD ACTION REQUESTED: None

ATTACHMENTS: (Attachment 1)



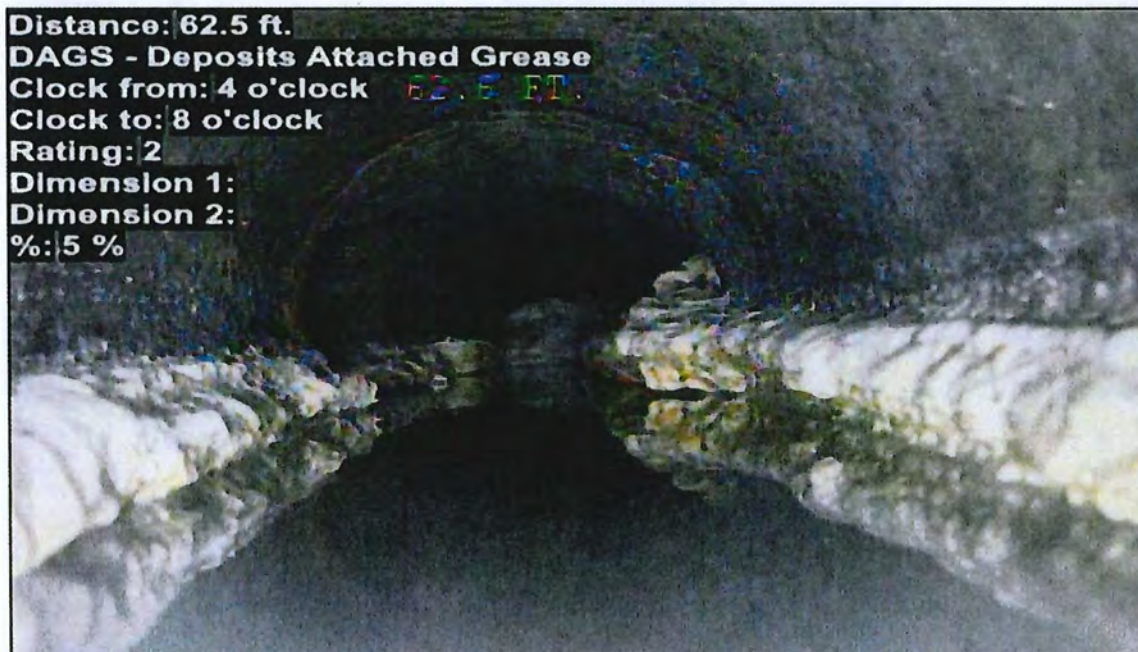
AGENDA ITEM EXECUTIVE SUMMARY

CONSENT AGENDA


(Attachment 2)



(Attachment 3)



AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Rivanna Water & Sewer Authority (RWSA) Monthly Update	AGENDA DATE: January 19, 2023
STAFF CONTACT(S)/PREPARER: Gary O'Connell, Executive Director 	CONSENT AGENDA: Informational
	ATTACHMENTS: Yes

BACKGROUND: This report continues the monthly updates on the Rivanna Water & Sewer Authority (RWSA) projects and Board meetings. Below are some updates on RWSA major projects and issues, including updates from the December 13th RWSA Board Meeting and other communications.

RWSA Board Meeting and other Updates and Approvals at the December 13th Board Meeting:

- **Presentation of Annual Report and Audit:** Both net position and unrestricted reserves increased, as a result of a positive budget year.
- **Observatory Water Treatment Plant:** This plant will be offline from now to March 15th to complete the renovation and treatment capacity increase from 7.7 to 10 mgd (million gallons daily). During this time, the South Rivanna Water Reservoir Supply and Treatment Plant will be fully operational to serve the Urban Water System.
- **Reservoirs Pipeline Project:** Final private property owner easement signed. The final easement to complete is with the UVa Foundation.
- **Reservoirs Storage Level:** At 100% full.
- **Dam Safety:** Presentation on the ongoing efforts by RWSA to monitor the safety and integrity of the 10 dams they have responsibilities for.
- **Review of the Community Water Supply Plan and Project Status:** With the completion of the new Ragged Mountain Reservoir and Dam project in 2014, there is a series of water supply and treatment projects either underway or planned to be started or completed over the next five years. Both of the major Urban Water Treatment Plants (Observatory and South Fork Rivanna) are nearing major rehabilitation and in Observatory's case, expansion of daily capacity to 10 mgd. When complete, both water treatment plants connect directly to large reservoirs that can independently serve the entire Urban Water System individually if needed in an emergency – the ultimate redundancy and reliability. A major piping upgrade between Ragged Mountain and the Observatory Plant is under design. The Central

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

Water Line is critical to connecting the upgraded Observatory Treatment Plant to the Urban Water System. The last of these projects is the Reservoirs Raw Water Line (South Fork to Ragged Mountain Reservoirs) and increasing the fill 12 feet at the Ragged Mountain Reservoir. A graphic is attached that shows the Water Supply Plan. Also attached is a graphic of the six remaining Water Supply Treatment projects to be completed. If you include the earlier work at the Ragged Mountain Dam and Reservoir, this is nearing a \$250 million series of water related projects.

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:	75%
Completion Date:	May 2023
Base Construction Contract:	\$37,467,169.49
Approved Capital Budget:	\$43,000,000

Current Status:

At South Rivanna, lead paint abatement continues. Work at Observatory includes the new Chemical Storage Building, sedimentation basin improvements, foundation work for the GAC building expansion and a large retaining wall. Shutdown of the OBWTP is underway for December 5, 2022 – March 15, 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.

AGENDA ITEM EXECUTIVE SUMMARY

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

Design Engineer:	Short Elliot Hendrickson (SEH)
Contractor:	Anderson Construction
Construction Start:	December 2021
Percent Complete:	27%
Completion Date:	December 2023
Base Contract:	\$8,520,312
Budget:	\$10,000,000

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 (40%)
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 40% stage.

AGENDA ITEM EXECUTIVE SUMMARY

History:

Raw water is currently transferred from the Ragged Mountain Reservoir (RMR) to the Observatory Water Treatment Plant by way of two 18-inch cast iron raw water lines, which have been in service for more than 110 and 70 years, respectively. The proposed water line will be able to reliably transfer water to the expanded Observatory Plant, which, upon completion, will have the capacity to treat 10 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 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:	December 2023
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 will be finalized when a remaining sod boring is completed.

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.

AGENDA ITEM EXECUTIVE SUMMARY

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

Design Engineer:	Schnabel Engineering (Dam)
Design Engineer:	Hazen and Sawyer (Pump Station)
Project Start:	February 2018
Project Status:	90% 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 this month. Remaining NRCS requirements, including review and approval of the planning study, are scheduled for completion this winter. The revised Plan Environmental Assessment was approved by the NRCS. NRCS funding for the final design and dam spillway upgrades will be requested at a future date.

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:	60% Design
Construction Start:	2024
Completion:	2028
Budget:	\$7,000,000

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

Current Status:

Geotechnical work has begun to determine rock depths for the trenchless crossing under the river parallel to the west side of the Berkmar Bridge and follow Rio Mills Road until it intersects the new 24" water line in Route 29. Easement work has begun.

History:

RWSA has previously identified through master planning that a 24-inch water main will be needed from the South Rivanna Water Treatment Plant (SRWTP) to Hollymead Town Center to meet future water demands. Two segments of this water main were constructed as part of the VDOT Rt. 29 Solutions projects, including approximately 10,000 LF of 24-inch water main along Rt. 29 and 600 LF of 24-inch water main along the new Berkmar Drive Extension, behind the Kohl's department store. To complete the connection between the SRWTP and the new 24-inch water main in Rt. 29, there is a need to construct a new river crossing at the South Fork Rivanna River. Acquisition of right-of-way will be required at the river crossing.

- **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:	2022
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.

AGENDA ITEM EXECUTIVE SUMMARY

- **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.

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

Design Engineer:	SEH/DiNatale
Project Start:	August 2020
Project Status:	100% (Phase 1) 95% (Phase 2)
Completion:	December 2022
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.

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.

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

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:	20% 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.

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:	50% (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.

AGENDA ITEM EXECUTIVE SUMMARYHistory:

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.

Attachments

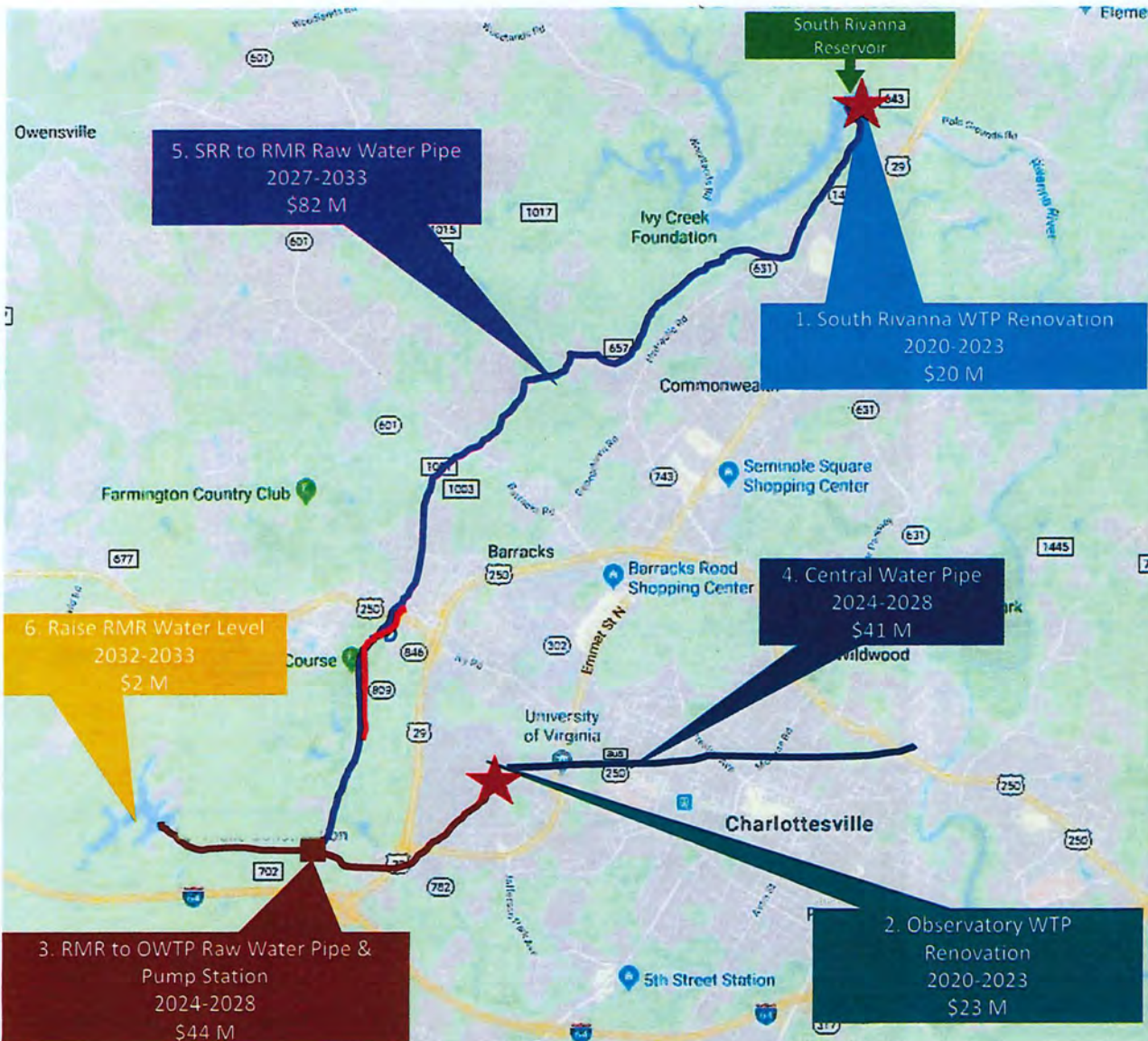
010101RWSAUpdateExecSumm011923

Water Supply Projects Plan

(Dec 2, 2022)

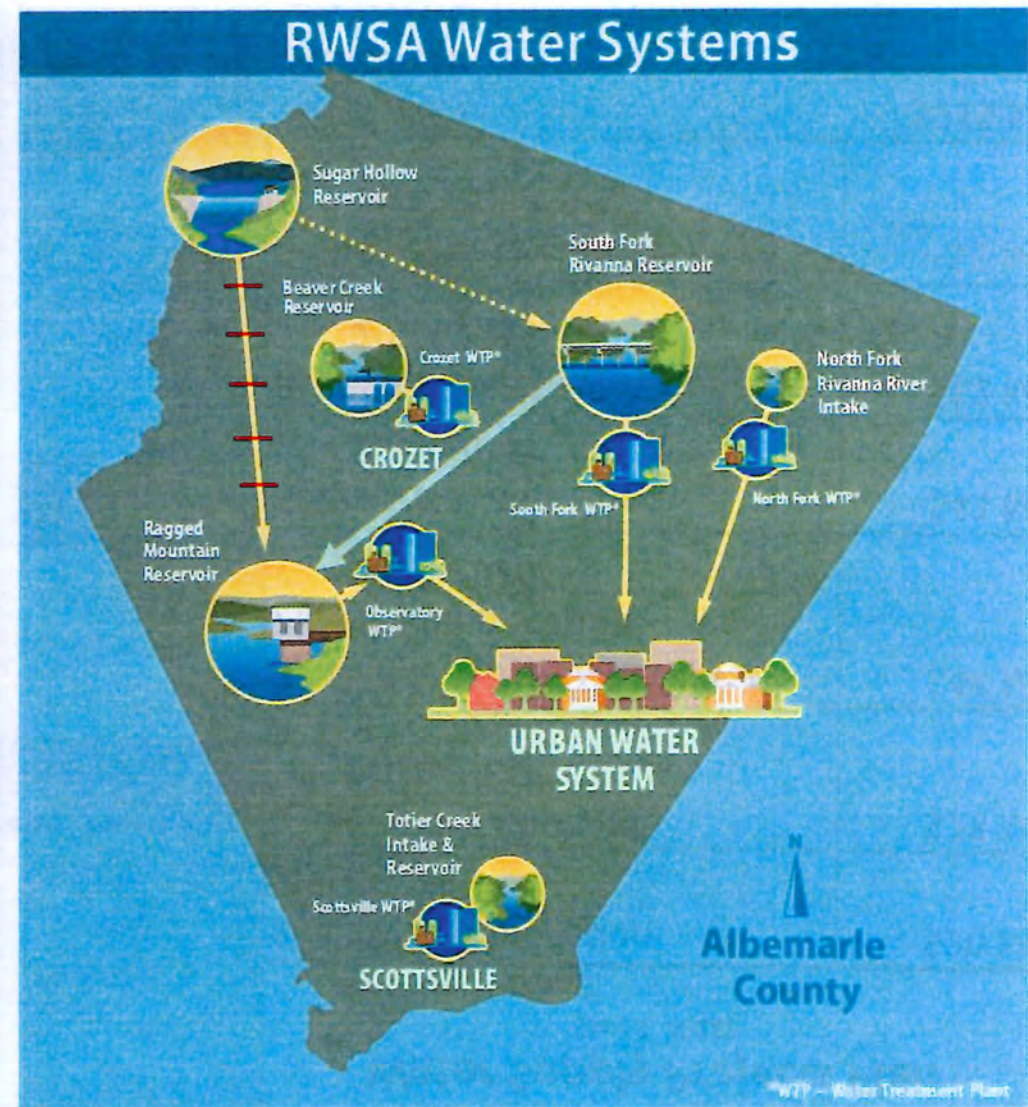
1. SR WTP Renovation 2020-2023	\$20 M
2. OB WTP Renovation 2020-2023	\$23 M
3. RMR to OB WTP Raw Water Pipe & Pump Station 2024-2028	\$44 M
4. Central Water Line 2024-2028	\$41 M
5. SRR to RMR Raw Water Pipe 2027-2033	\$82 M
6. Raise RMR Water Level 2032-2033	\$5 M
City: \$79 M ACSA: \$136 M	\$215 M

12



Plan to Increase the Capacity and Reliability of our Public Drinking Water Supply

- Build new, higher dam at RMR
- Build new pipe from SRR to RMR
- Close existing pipe from SHR



[illegible]

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Advanced Metering Infrastructure (AMI) Monthly Update	AGENDA DATE: January 19, 2023
STAFF CONTACT/PREPARER: Quin Lunsford, Director of Finance	ACTION: Informational
	ATTACHMENTS: No

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

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

- We are hopeful that meter supply continues to improve, and we are able to enter the final deployment phase early this calendar year. The Authority team will be meeting with the contractor throughout January to prepare for this deployment.
- Our contractor continues to replace meter registers on a small number meters that have been identified as having potential defects that increase the likelihood of meter failure. We have repaired 190 meters out of the total 270 meters with the manufacturing defect. The remainder will be replaced as replacement registers are received.

BUDGET IMPACT: Informational only.

RECOMMENDATIONS: None

BOARD ACTION REQUESTED: None; informational item only.

ATTACHMENTS: N/A

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: VERIP Application**AGENDA DATE:** January 19, 2023**STAFF CONTACT(S)/PREPARER:**Gary O'Connell, Executive Director
and Emily Roach, Director of Human
Resources & Administration *ER***ACTION:** **ATTACHMENTS:** No

BACKGROUND: The Voluntary Early Retirement Incentive Program (VERIP) is a Service Authority benefit in addition to a Virginia Retirement System (VRS) monthly income. To apply an employee must be eligible to apply for early or full retirement under the provisions of the Virginia Retirement System (VRS). Eligibility includes having worked for ACSA for the past 10 years; prior service does not count in the 10-year service. Disability retirement does not qualify for VERIP participation. The same calculation used by VRS in calculating a monthly retirement income is used to credit eligible employees with up to five years additional service to the ACSA. Based on that calculation, an additional salary, or monthly stipend, is determined. This stipend is paid for up to five years, or until age 65, whichever comes first. This is taxable income.


In addition, for the same time, the ACSA will contribute toward health and dental insurance the same amount as is contributed for active employees within that same coverage level; at this time that amount is \$681.00 per month. Employees are free to use that money to purchase health insurance elsewhere, to join a spouse's plan that may be cheaper, to collect the money in an annual lump sum amount (post tax) or participate in the ACSA's cafeteria plan and continue paying premiums pre-tax for the length of time eligible to participate. Employees are eligible to stay on the ACSA's health insurance policy until age 65 or at Medicare eligibility; however, ACSA contribution will cease at the end of the VERIP period, or at age 65, whichever comes first.

DISCUSSION: Upon the recommendation of the Executive Director, as per the VERIP Policy, we seek the Board's consideration and approval of Jill Zimmerman, Modeling Engineer, application for retirement through ACSA's VERIP program. Jill has indicated a retirement date of July 1, 2023, which will be 24 years and 2 months of employment with the ACSA.

BOARD ACTION REQUESTED: Approval of Jill Zimmerman's VERIP application.

ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: VERIP Application	AGENDA DATE: January 19, 2023
STAFF CONTACT(S)/PREPARER: Gary O'Connell, Executive Director and Emily Roach, Director of Human Resources & Administration <i>ER</i>	ACTION:  ATTACHMENTS: No

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DISCUSSION: Upon the recommendation of the Executive Director, as per the VERIP Policy, we seek the Board's consideration and approval of Michael Chidester, Facilities Maintenance Technician, application for retirement through ACSA's VERIP program. Michael has indicated a retirement date of August 1, 2023, which will be 14 years and 4 months of employment with the ACSA.

BOARD ACTION REQUESTED: Approval of Michael Chidester's VERIP application.



ACSA Water Conservation Program & Activity Report FY 2022

BOARD OF DIRECTORS MEETING
ANNUAL REPORT
JANUARY 19, 2023

TOILET REBATE PROGRAM

ACSA customers are eligible for rebates up to \$100 per toilet (maximum of three for residential customers) when they replace older, water guzzling toilets with new low-flow (1.6 gallons per flush or less).

In FY 2022:

∞ 131 toilets replaced

∞ \$12,381.11 rebated back to ACSA customers

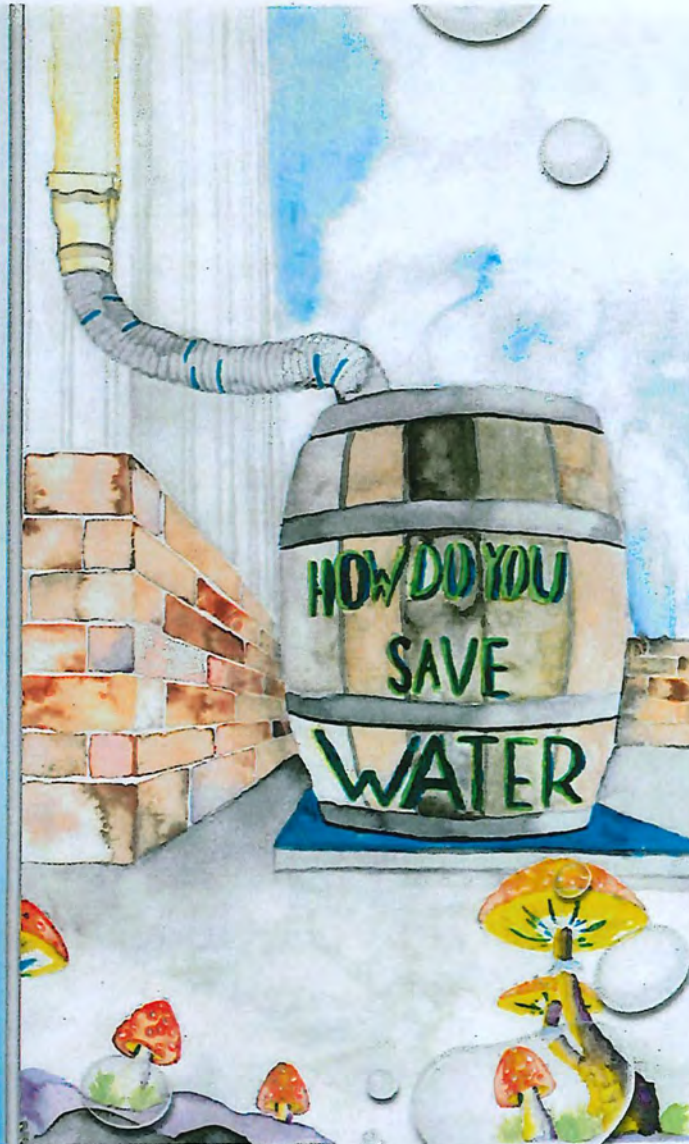


RAIN BARREL REBATE PROGRAM

ACSA residential customers are eligible for rebates up to \$30 per rain barrel (maximum of two) when they purchase a rain barrel.

In FY 2022:

- ∞ 7 rain barrels were installed
- ∞ \$198.44 rebated back to ACSA customers





CARWASH CERTIFICATION PROGRAM

- ⌘ Voluntary program
- ⌘ Water use of various levels of a carwash are measured to obtain certification
- ⌘ Guarantees that facilities may remain open during drought warning stage
- ⌘ 7 out of 9 carwashes participating in the program as of mid 2022
- ⌘ ACSA staff will be pursuing certification with the 4 newly constructed carwashes in 2023.

PUBLIC AWARENESS EVENTS



IMAGINE A DAY WITHOUT WATER

NATIONAL CAMPAIGN TO EDUCATE COMMUNITIES ABOUT THE VALUE OF WATER AND THE NEED FOR INVESTMENT IN ITS SUSTAINABILITY. ANNUALLY THE ACSA, IN PARTNERSHIP WITH THE CITY OF CHARLOTTESVILLE AND RWSA, PARTICIPATES IN VARIOUS EVENTS SUCH AS THE KICK-OFF CELEBRATION AND AN ART CONTEST OPEN TO ALL CITY AND COUNTY STUDENTS GRADE K-12. IN FY 2020, THERE WERE 120 ARTWORK ENTRIES. DUE TO THE COVID-19 PANDEMIC, THERE WAS NO KICK-OFF EVENT OR AWARDS CEREMONY AS IN PAST YEARS.

FIX-A-LEAK 5K FAMILY RUN

ANNUAL EVENT AND THE CULMINATION OF FIX-A-LEAK WEEK, THIS IS A FUN, FAMILY-FRIENDLY RACE SPONSORED BY THE CITY OF CHARLOTTESVILLE, WHERE PARTICIPANTS CHASE AN ACTUAL RUNNING TOILET AND LEARN HOW TO FIX LEAKS IN THEIR HOME AND SAVE WATER. LOTS OF FUN FAMILY ACTIVITIES! THE ACSA HOSTS A TABLE WITH WATER CONSERVATION KITS AND INFORMATION. THIS PAST YEAR'S RACE WAS PART OF A LARGER FESTIVAL ALONG THE RIVANNA RIVER.

CONSERVATION TABLE IN ACSA LOBBY

AS PART OF AN ONGOING EFFORT TO PROMOTE CONSERVATION TO OUR CUSTOMERS DAILY, THE ACSA HAS A CONSERVATION TABLE ON DISPLAY IN THE LOBBY OF THE OPERATIONS CENTER. THE TABLE IS MAINTAINED AND REPLENISHED BY THE ADMINISTRATION TEAM AND INCLUDES ITEMS SUCH AS SHOWER TIMERS, TOILET TANK BAGS, AERATORS, AND LOW-FLOW SHOWER HEADS. THERE ARE ALSO CONSERVATION-THEMED FUN ITEMS FOR CHILDREN SUCH AS COLORING BOOKS AND STICKERS.

AGENDA ITEM EXECUTIVE SUMMARY

AGENDA TITLE: Lead and Copper Regulations and Inventory	AGENDA DATE: January 19, 2023
STAFF CONTACT(S)/PREPARER: Jeremy M. Lynn, P.E., Director of Engineering and Tim Brown, Environmental Compliance Specialist	ACTION: <input type="checkbox"/> INFORMATION: <input checked="" type="checkbox"/>
	ATTACHMENTS: YES

BACKGROUND: In 1991, the Environmental Protection Agency (EPA) published a regulation to control lead and copper in drinking water, known as the Lead and Copper Rule. Since 1991, the Lead and Copper Rule has undergone several minor revisions, primarily to address implementation issues and streamline the monitoring and reporting burden on utilities. After much debate and several delays, the Revised Lead and Copper Rule became effective on December 16, 2021, with all components of the revised rule to be implemented by October 16, 2024. Highlights of the Revised Lead and Copper Rule include:

- ❖ Service line identification and inventory
- ❖ Lead Service Line (LSL) Replacement Plan
- ❖ Increased focus on corrosion-control treatment
- ❖ Changes in tap sampling and tiering
- ❖ School/childcare facility testing mandated for the first time; sampling spread over as much as five (5) years
- ❖ Enhanced transparency and public education/outreach

The biggest challenge for the ACSA will be completing the service line identification and inventory component of the Revised Lead and Copper Rule. Through a variety of methods, ACSA staff have been able to identify more than 85% of the existing public and private service line materials and have yet to identify a single lead service line in our water distribution system.

DISCUSSION:

- ❖ Corrosion control efforts by the Rivanna Water and Sewer Authority (RWSA) began more than 40 years ago. Transition to an ortho-phosphate product was approved by the Virginia Department of Health (VHD) in 2019 following extensive laboratory testing. Water treatment plants, distribution system and in-home sampling were conducted to confirm findings in the field were consistent with laboratory testing.
- ❖ Elementary and childcare facilities is mandated by the Revised Lead and Copper Rule. The ACSA's service area includes 14 public elementary schools, 11 private elementary schools, and 38 licensed childcare facilities. The ACSA will begin communication efforts with these facilities this spring on these new testing requirements.

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

- ❖ Identification of service line materials must involve both public and private portions and must include all service lines including those serving vacant/abandoned buildings, irrigation systems and fire suppression systems.
- ❖ Inventory must be made publicly available for all systems serving greater than 50,000 customers.
- ❖ All customers that fall outside of the confirmed “non-lead” category for service line material must be notified within 30 days of submittal of the inventory to VDH, and then annually until the lead service is removed or the material category is revised.

BUDGET IMPACT: None.

RECOMMENDATIONS: None.

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

ATTACHMENTS: PowerPoint presentation – Lead and Copper Regulations and Inventory

LEAD AND COPPER REGULATIONS AND INVENTORY

ACSA BOARD OF DIRECTORS
MEETING

JANUARY 19, 2023



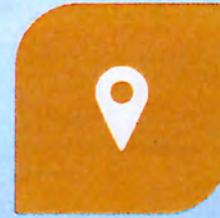
PRESENTATION OUTLINE



**WHAT IS THE
REVISED LCR?**



WHAT'S NEW?

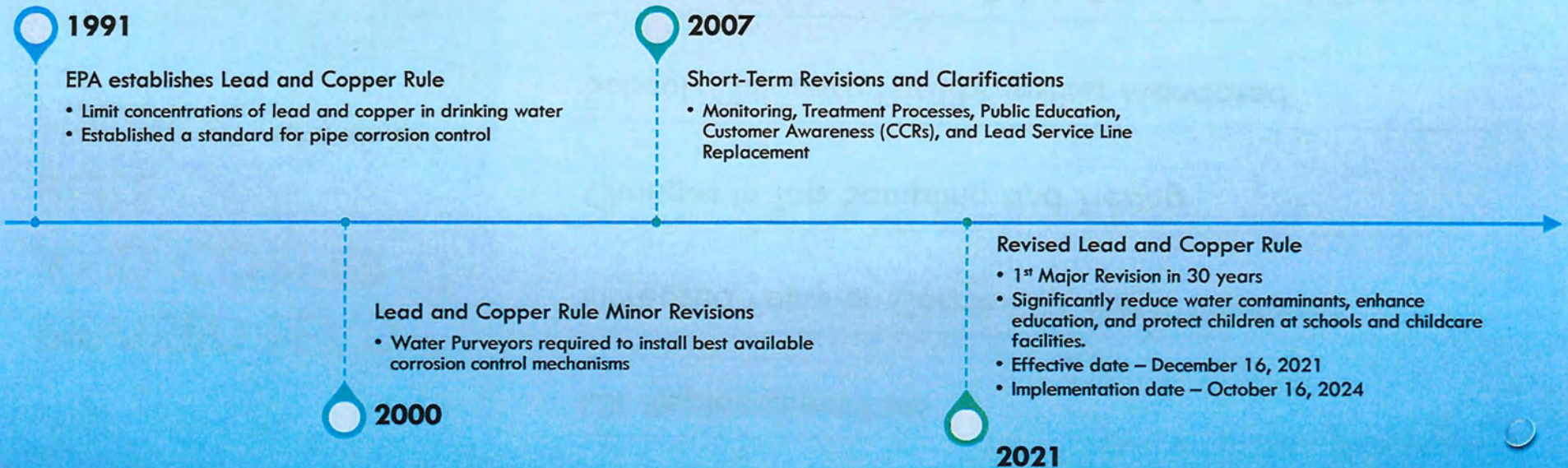


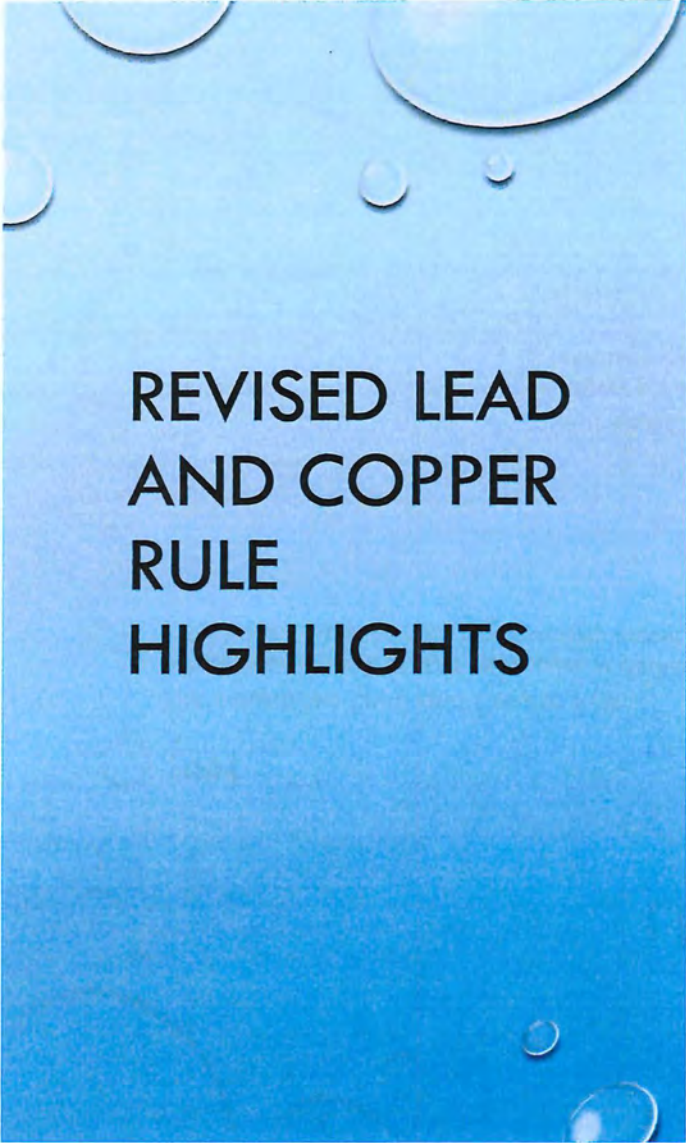
**WHERE ARE
WE?**



**FUTURE
EFFORTS**

LEAD AND COPPER RULE





REVISED LEAD AND COPPER RULE HIGHLIGHTS

Service Line Identification and Inventory

LSL Replacement Plan

Increased Focus on Corrosion-Control Treatment

Changes in Tap Sampling and Tiering

School/Childcare Facility Testing Mandated

Enhanced Transparency, Public Education and Outreach

CORROSION CONTROL TREATMENT BY RWSA

RWSA has fed
Corrosion Inhibitor
for more than 40
years

Proactive Decision to
Transition from
polyphosphate to
ortho-phosphate

Ortho-phosphate is
better at Pb and Cu
Control

Transition Approved
by VDH in 2019

Crozet System
Blend: 12/2019
Ortho Only:
2/1/2021

Scottsville System
Blend: 9/9/2020
Ortho Only:
10/20/2021

Urban System
Blend: 1/29/2021
Ortho Only:
2/1/2022

SCHOOL AND CHILDCARE TESTING

Testing Requirements
– 20% of the Schools
and Childcares
Annually

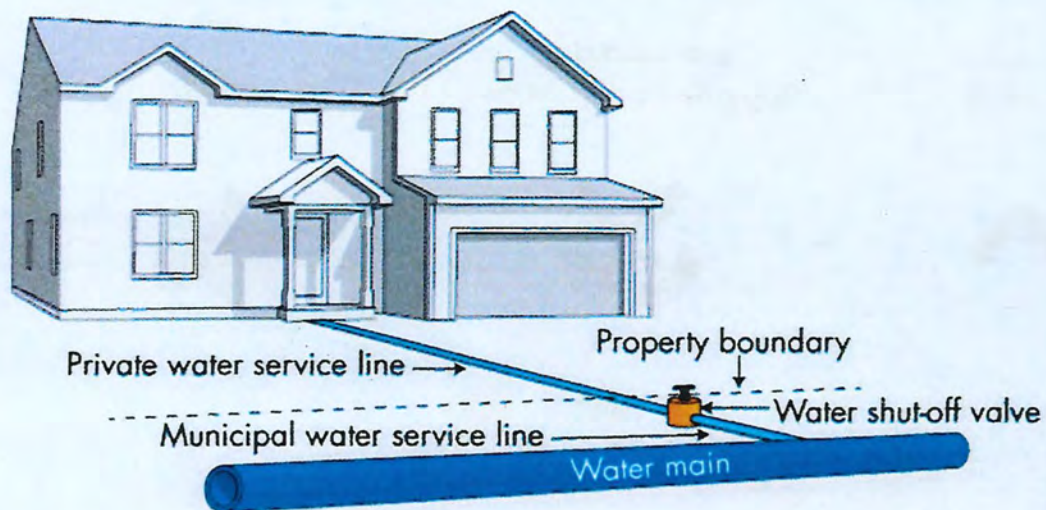
Sample results and
public education are
required to be
provided to the
schools

14 ACPS and 11
Private Elementary
Schools

38 Licensed
Childcare Facilities



SERVICE LINE IDENTIFICATION HIGHLIGHTS



Inventory is a living dataset that is continuously improved over time.

Identification of service lines must involve both public and private portions.

Must include all service lines, including vacant/abandoned buildings, fire suppression systems and irrigation systems.

Inventory must be made publicly available online for systems serving more than 50,000 customers.

SERVICE LINE IDENTIFICATION AND INVENTORY



Lead



Galvanized Requiring
Replacement



Non-Lead



Lead Status Unknown

SERVICE LINE IDENTIFICATION METHODOLOGY

Age of Construction

Water System Records

New Water Main Installation and Replacement

Meter Repair and Replacement

In-home Customer Inspection

Excavation

WHERE ARE WE?

ACSA Lead Material Compliance Dashboard

ACSA Service Verification



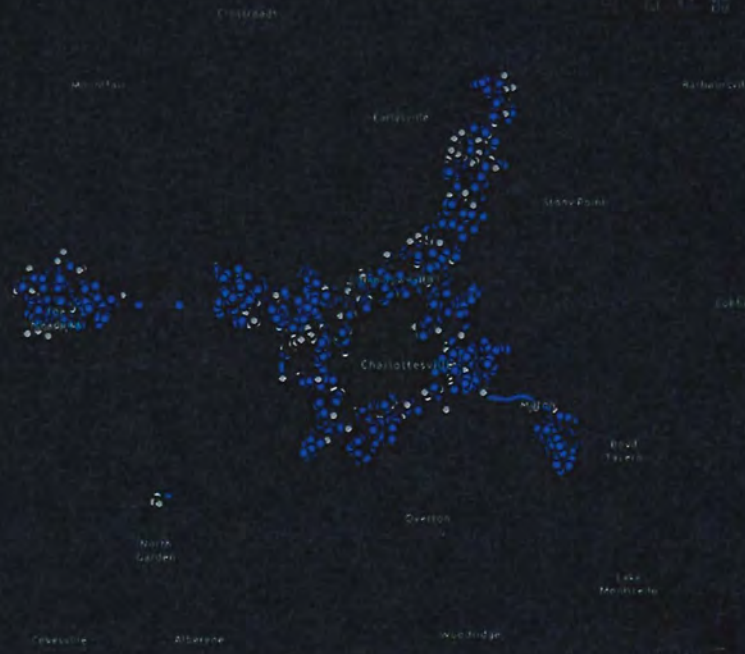
PS Service Verification



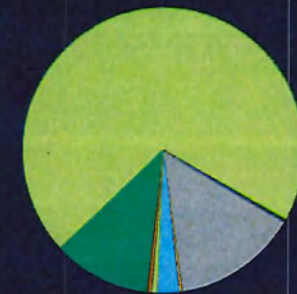
ACSA Service Lines



PS Service Lines



PS Service Line Material Source



VIEW FULL HERE: [Open in Tableau](#) METADATA: [USGS](#) [FPA](#) [NPS](#) [USDA](#) [ATCA](#)

Powered by Esri

PS Material Category

0

Lead or GRR

PS Material Category

20,176

Non-Lead

PS = Private Side
ACSA = ACSA-Side / ACSA owned

FUTURE EFFORTS

Notify	Notify all public and private schools, and licensed childcare facilities served by the ACSA
Coordinate	Coordinate with County Schools on Testing of Elementary schools
Develop	Develop Testing Plan for Licensed Childcare Facilities
Continue	Continue LSL Inventory Efforts



QUESTIONS?



**2022 ANNUAL REPORT
SUCSESSES AND ACCOMPLISHMENTS**

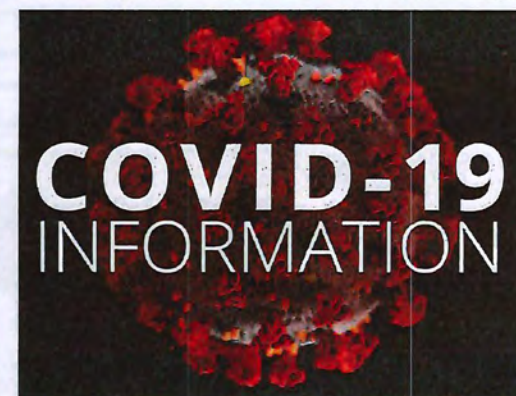
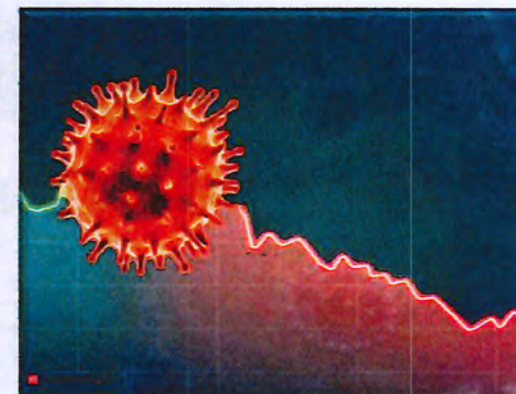
Board of Directors' Meeting

January 19, 2023

OVERCOMING COVID'S CHALLENGES

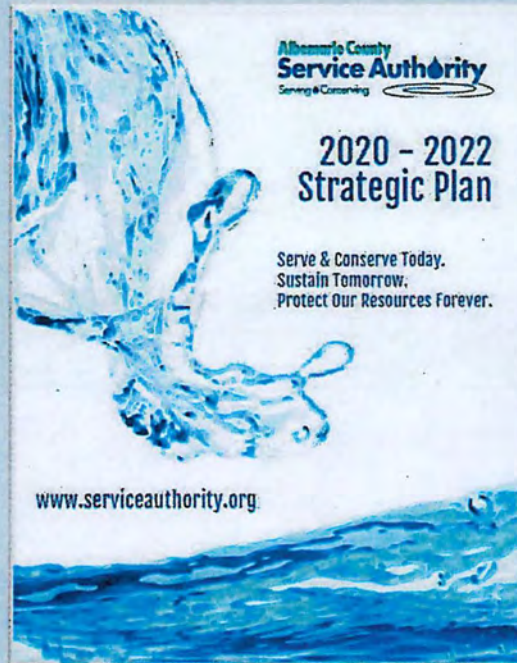
Overcoming COVID challenges for now three years running by:

- Continuing operations seamlessly;
- Keeping the water flowing;
- Maintaining a high-level of customer service;
- Providing safe drinking water;
- Working intensely with customers behind on payments;
- Returning to “normal”;
- Reopening to the public in April 2022;
- Providing a new payment drop box for customers.



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
- Completion by December 2022



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

Strategy	Implementation Date	Current Status	Notes	Next Update	Overall Progress
1. Establish a clear vision and mission statement for the Authority.	2020-2021	Completed	Completed	2021-2022	100%
2. Develop a comprehensive strategic plan that aligns with the vision and mission.	2020-2021	In Progress	Completed	2021-2022	75%
3. Implement the strategic plan and monitor progress.	2020-2021	In Progress	Completed	2021-2022	50%
4. Evaluate the progress of the strategic plan and make adjustments as needed.	2020-2021	In Progress	Completed	2021-2022	25%
5. Report on the progress of the strategic plan to the Board of Directors.	2020-2021	In Progress	Completed	2021-2022	0%

Legend: ● Not Started ● In Progress ● Completed

BOARD POLICY ISSUES – “THE YEAR THAT WAS”

Rate Study

June Adoption (five months):

- Budget
- Rates
- Capital Improvements Program
- Compensation Study Recommendations
- Rules and Regulations

Disconnection Policy (reinstated after two and half years)

Customer Assistance Grants for \$385,000 and New Low-Income Household Assistance Program

Contractor Agreement/Mediation

Financial Reports and Year-End Appropriations

Capital Project Reports and Updates

ACSA Investment Policies Review

Northern Urban Water System Cost Allocation, Upper Morey Creek Sewer Line Transfer and Upper Woodbrook Sewer Transfer

Virtual to In-Person Board Meetings with a Public Virtual Option

Purchasing and Design Build Procedures

BOARD BACKGROUND/OPERATIONAL PRESENTATIONS

**ERP – New Munis
Financial and Human
Resources System**

**Cybersecurity
Assessment Update**

Easement Clearing

**AMI Project Status
Reports – Customer
Video**

**Water Quality
Updates**

**Cityworks Demo –
Service Requests,
Work Orders,
Inventory, Reporting;
Monthly Updates**

**ARC GIS
(Geographic
Information System)**

**Customer Arrearages
Report**

Supplier Issues

**Construction and
Engineering
Contracts**

**ARV's and
Autoflushers**

Exclusion Meters

Energy Audit

**Strategic Plan
Updates**

**Four-Story Backflow
Retrofit**

ACSA MANAGEMENT AND LEADERSHIP TEAM



Gary O'Connell, Executive Director



Quin Lunsford, Director of Finance



Jeremy Lynn, Director of Engineering



Mike Lynn, Director of Operations



Emily Roach, Director of Human
Resources & Administration



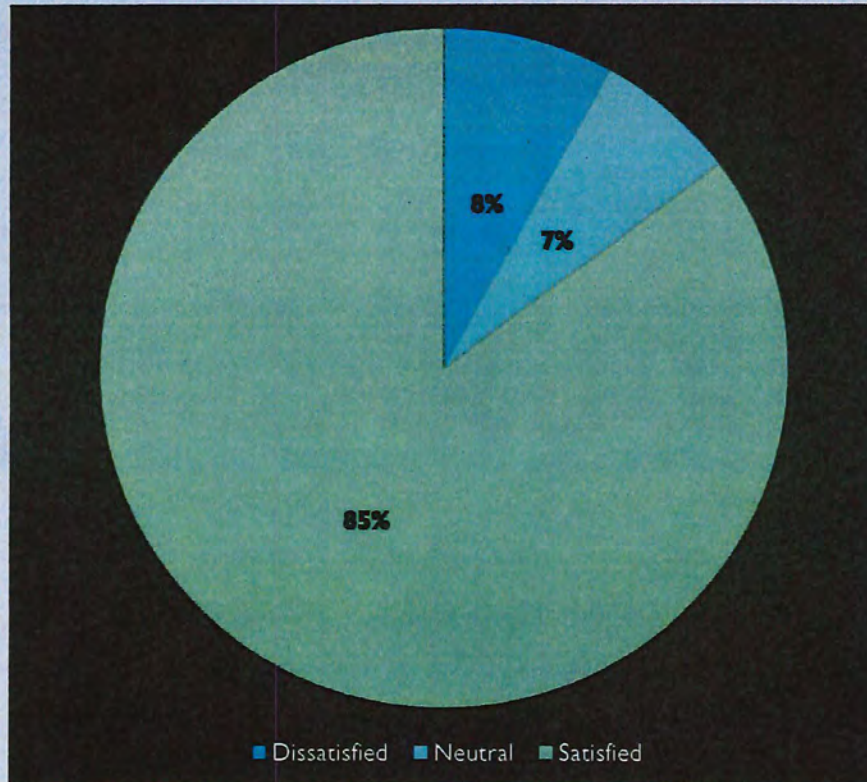
April Walker, Director of Information
Technology



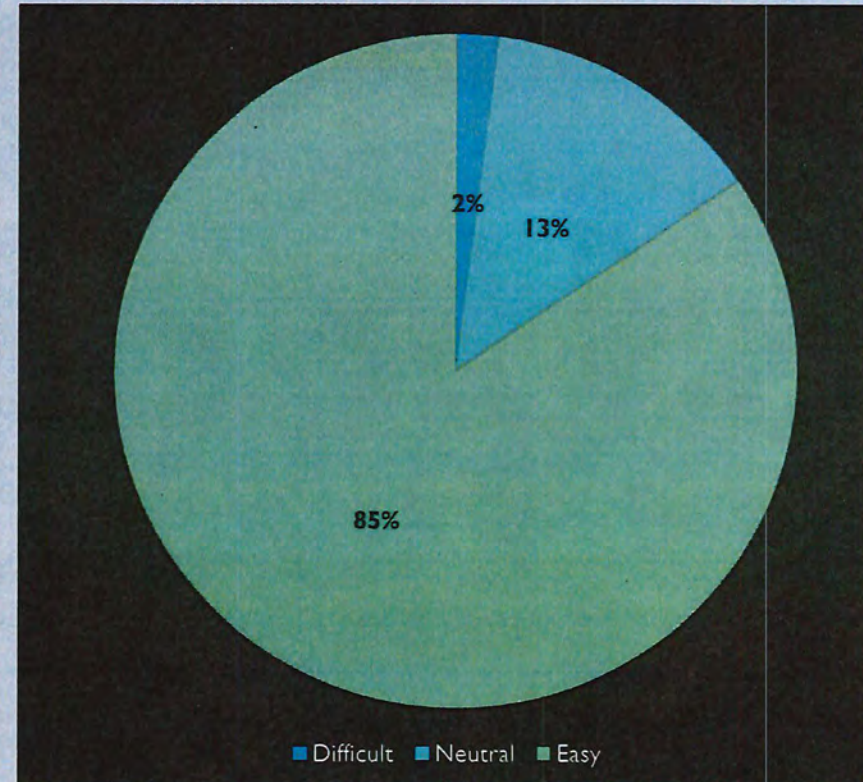
**THE “HEART AND SOUL” OF THE ACSA
IS OUR EMPLOYEES**

7

2022 OVERALL CUSTOMER EXPERIENCE SURVEY RESULTS

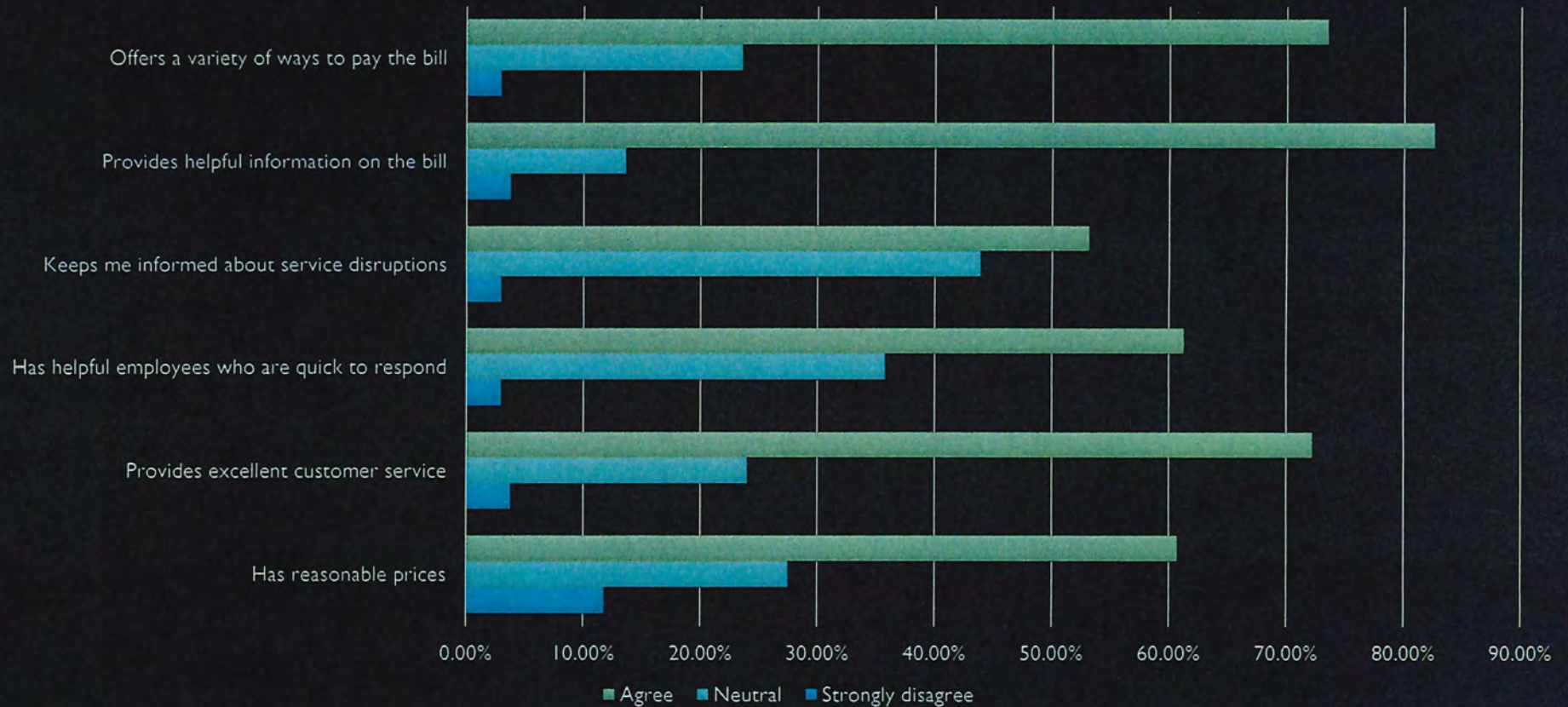


Overall, how satisfied are you with the ACSA?

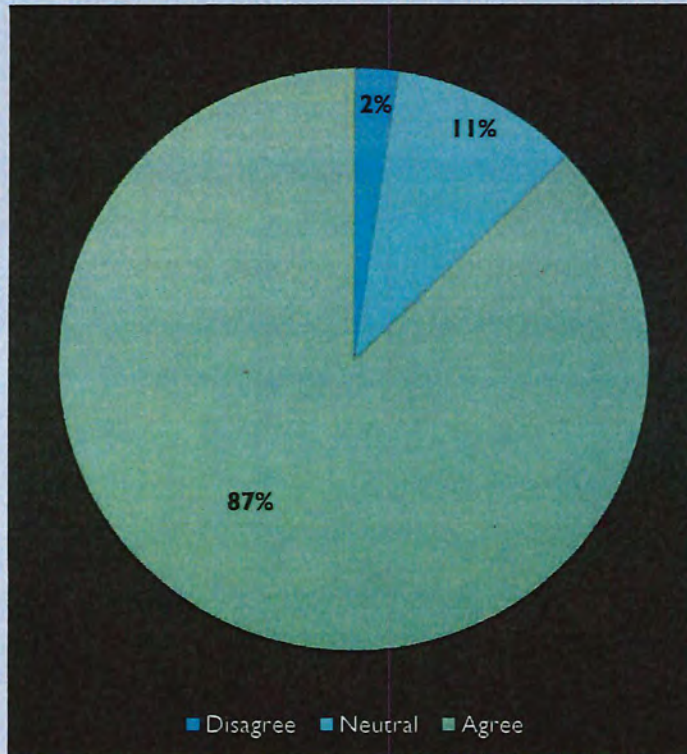


Overall, how would you rate the ease of doing business with the ACSA?

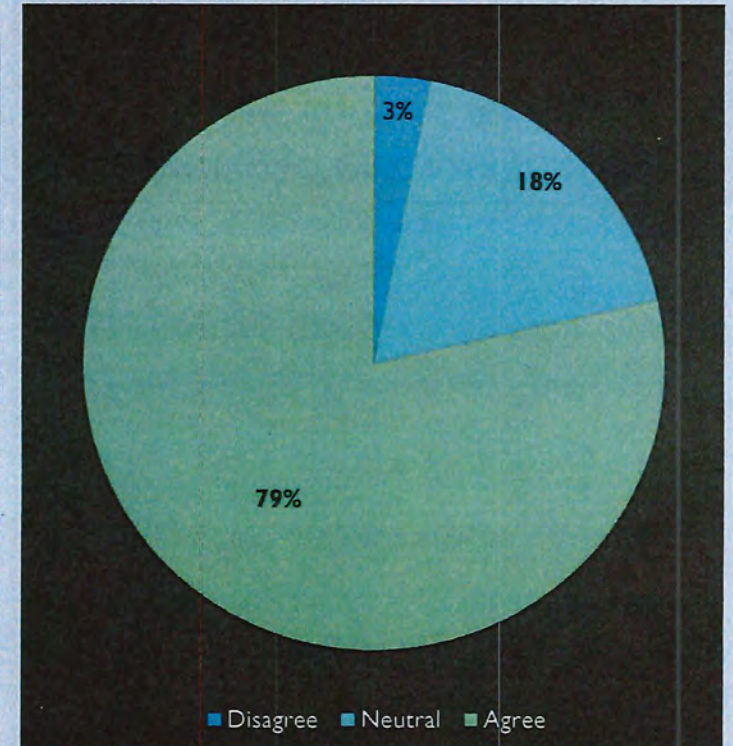
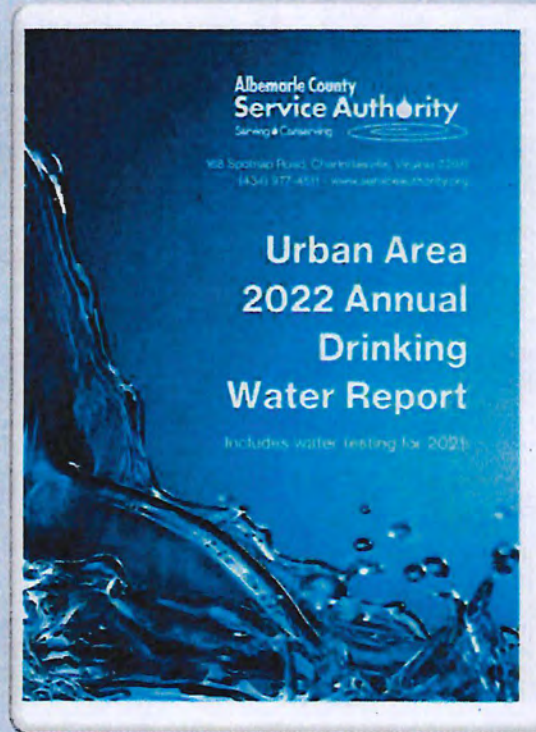
Please tell us how strongly you agree or disagree with the following statements:



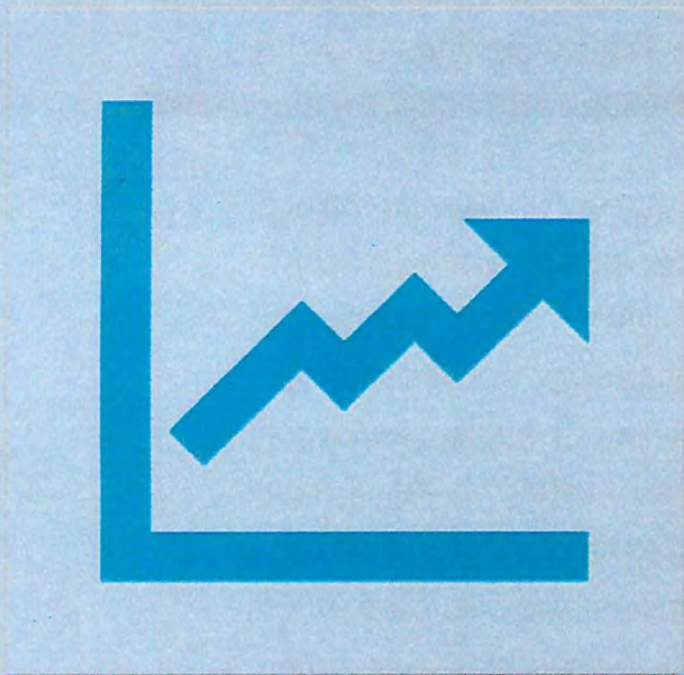
WATER QUALITY SATISFACTION



"Provides safe and reliable water service"



"Communicates useful information about my water"

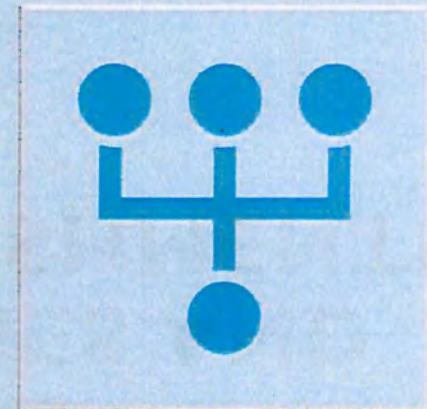


2022 SUCCESSES AND ACCOMPLISHMENTS

KEY ACCOMPLISHMENTS

- **Succession transitions successful**

- ☐ April Walker, Director of Information Technology
- ☐ Brendan Ganz, Systems Engineer
- ☐ Jeremy Lynn, Director of Engineering
- ☐ Justin Weiler, Senior Civil Engineer
- ☐ Dwayne Shifflett, Crew Leader
- ☐ Robbie Lawson, Operations Supervisor
- ☐ WJ Lamb, CCTV Technician
- ☐ Josh Chidester, Senior Meter Technician
- ☐ Mike Derdeyn, ACSA Attorney

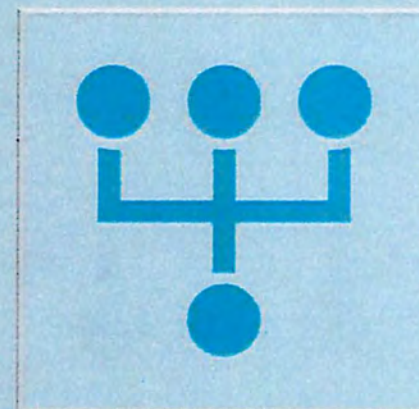


- **Succession training career development**

- ☐ UVA Darden School Executive Education
- ☐ BizLibrary
- ☐ Ongoing professional development and skill-building training

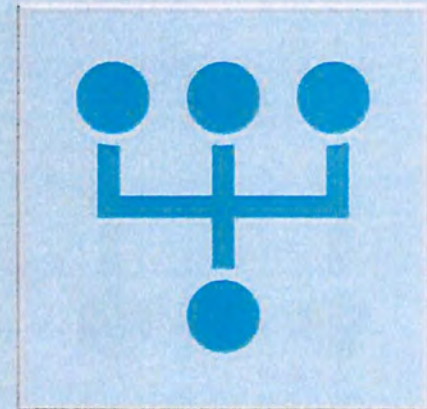
KEY ACCOMPLISHMENTS (CONTINUED)

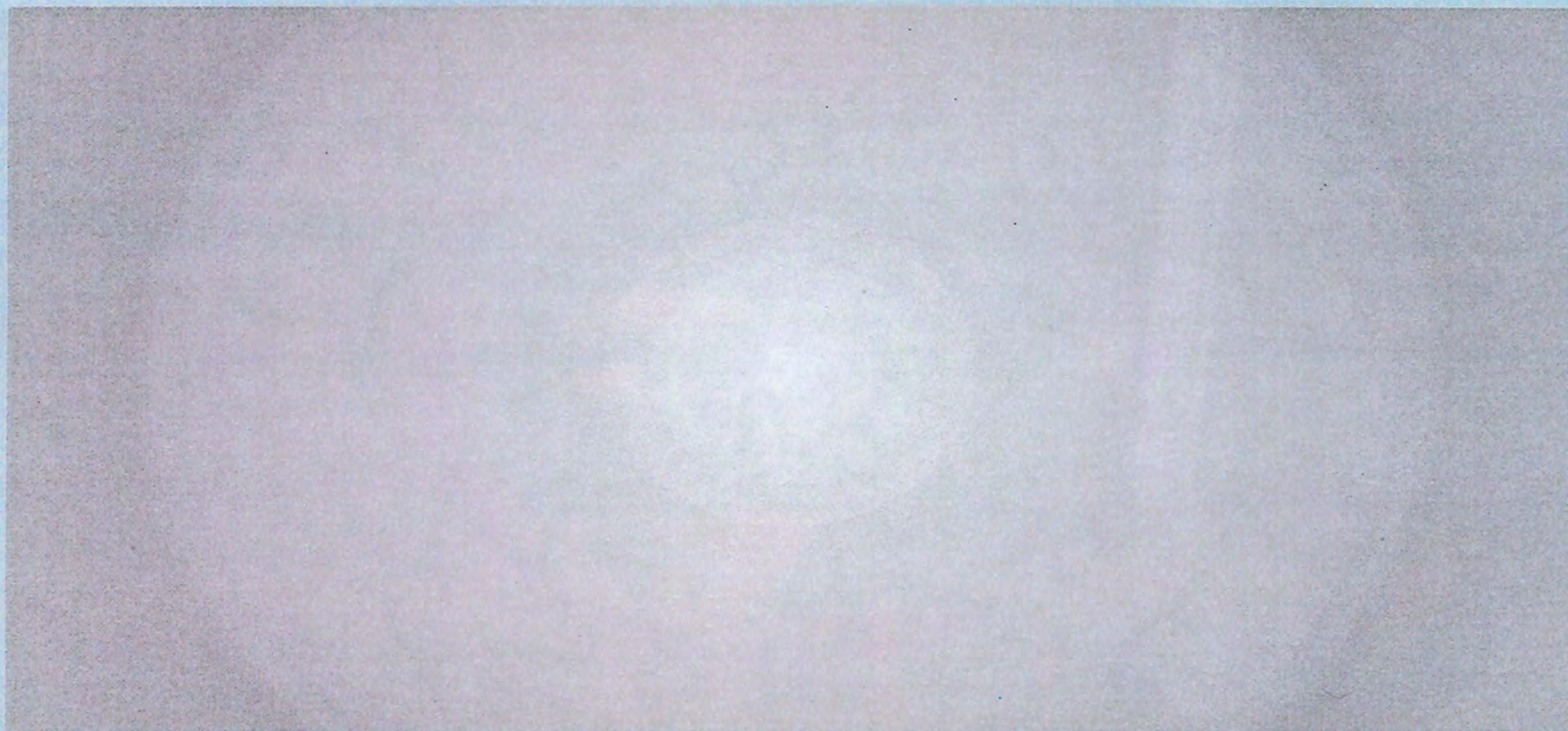
- AMI Network Infrastructure Completed
- Cityworks
- Strategic Plan Complete
- Compensation Study
- Customer Survey Feedback
- MyWater Branding
- Best Practices Review – Overall
- Cyber (CSIS) Security



OTHER ACSA ACCOMPLISHMENTS

- Munis – New Financial System
- Capital Projects – Upgrades
- Institutionalize with Training – Emergency Response Plans
- Customers in Arrears – Payment Plans, Customer Assistance
- E-Pay, Paymentus – 70% Electronic Payments
- Customer Experience Project
- Exclusion Meter Project
- Imagine a Day Without Water - Artwork





My Water
Provided by ACSA

BRANDING VIDEO

HESSIAN HILLS WATER MAIN REPLACEMENT

- This project followed our Strategic Plan goal to replace aging and undersized water mains throughout our system.
- It also eliminated a small amount of PVC main installed in the early 1980's.
- Night work was required along Barracks and Georgetown Roads due to high traffic volumes.



OAK FOREST PUMP STATION ABANDONMENT PROJECT

- This wastewater pump station was constructed 35 years ago by private development and the original equipment was wearing down.
- The building and wet well were also undersized and deteriorating.
- With the development of the Stonefield area between Route 29 and Commonwealth Drive, ACSA staff identified a sewer main extension project that could eliminate this aging pump station and avoid an expensive upgrade.



JEFFERSON VILLAGE WATER MAIN REPLACEMENT

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



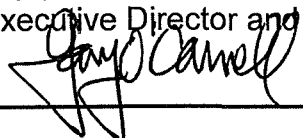
FUTURE 2023 YEAR AT ACSA

- High quality service continuing
- AMI next phase to get underway
- Budget/Rates for FY '24
- New Strategic Plan for 2023-2025

2023

AGENDA ITEM EXECUTIVE SUMMARY

CONSENT AGENDA

AGENDA TITLE: 2020-2022 ACSA Strategic Plan – Final Update	AGENDA DATE: January 19, 2023
STAFF CONTACT(S)/PREPARER: Gary O'Connell, Executive Director and Leadership Team 	ACTION: Informational
	ATTACHMENTS: Yes

BACKGROUND: The ACSA Board in July 2019 approved a new Strategic Plan for a three-year period through the end of 2022. We have reached completion with most of the major items in the plan. A couple of the items were major projects for the ACSA: AMI/Advanced Metering, CMMS/Cityworks, and the ERP new financial system.

Most strategic plan processes stop to take a look at upcoming strategic issues and identify any strategic future oriented “gaps” that need to be addressed. The two main “gap” strategic areas addressed over the three-year period were the AMI project (advanced metering infrastructure) - customer water use data and leak notifications, and the CMMS/Cityworks project (computerized maintenance management system) – customer service requests, work orders, inventory and asset management. Both have been major, multi-year efforts to successfully implement.

Strategic Plan areas are updated (see attached Tasks List) by using the green/yellow/red format to show status of items for which an update to the implementation plan is attached:

1. AMI – (advanced metering infrastructure) a detailed implementation plan has been developed; first phase testing of software and communications underway; second phase in the spring of 2021 with 490 AMI meters installed and operational; next 1,650 meters installed early 2022; next phase spring of 2023. All antenna equipment has been installed. Global supply issues have delayed meter delivery. Initial phases (2,140 meters) have been very successful.
2. CMMS/CityWorks – (computerized maintenance management system) A go live on the work order and inventory systems was completed in October 2020; Customer portal for service requests was implemented online in March 2022. Project complete; fully in use; reporting being utilized. Ongoing updating to more effectively utilize this software.

Other areas to either complete or implement:

3. Succession Plan – Plan has been implemented with continuing mentoring initiatives with staff; part of annual evaluations for additional discussion. Several management transitions have successfully occurred.

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

4. Best Practices Review – Schedule virtual best practices utility visits; several visits held to review the AMI systems; COVID delayed actual field visits; HR Review; IT Assessment and Review; Safety Review and Inspection. A November 2022 Best Practices Review Panel met for two days for observations and recommendations.
5. Emergency Response Plan – Completion of the Emergency Plan, presentation made to the Board; training and checklists; EPA certification completed; tabletop emergency exercises.
6. Implemented New Financial System – Successful go live on Munis system January 1, 2022. Great addition and capability to our management “toolkit”.
7. Implement IT Risk Assessment – In depth Cybersecurity Assessment implementation nearing full completion in early 2023.
8. Operations Center Expansion Plan – Planning approvals underway to lead to construction; parking lot completed; interior renovations completed; Avon site plan under design with County Planning approvals; CIP project; long-term facilities plan.
9. Managing/Utilizing Data – Explore strategic implementation plan to best manage for upcoming available data: GIS, Financial/ERP, SCADA, CMMS, AMI, Modeling, etc. Data Dashboards proposal FY '23 Budget, integration of data for management reporting.
10. Annual Water Audit – Initial Crozet and Scottsville Water Audits completed.
11. Energy Audit – Audit has been completed. CIP projects are scheduled.
12. Business Continuity Plan – Expanding on the emergency plan with a formal plan for business operations in times of crisis; during COVID we actually implemented “Business Continuity”, responsive and timely future project. Item to formally be completed in next Strategic Plan.
13. Annual “Market Rate” Recommendations for the annual budget to stay competitive within the local job market, and to reflect on the cost of living in the Albemarle area; market rate adjustment approved for FY '23 Budget.
14. Review Pay Plan Study with recommendations of the ACSA Pay Plan for competitiveness and internal equity; adopted, completed early 2022 for adoption in FY '23 Budget. All job descriptions and evaluations have been updated to reflect any changes.

AGENDA ITEM EXECUTIVE SUMMARY

CONSENT AGENDA

We are in the midst of completing the next Strategic Plan and have a presentation planned for the March Board meeting. The following four focus areas are being explored:

- Business Continuity – Reliability
- Customer Experience
- Employee Experience
- Data Management Utilization

In February, we will share some of our planning work with the Board: customer and employee surveys and feedback, Customer Experience Project, Board Strategic Plan issue areas, and a summary of recommendations and observations from the Best Practices Review Panel.

BOARD ACTION REQUESTED: Informational.

ATTACHMENTS:

- ACSA Strategic Planning List of Goals, Strategies and Implementation Tasks 2020-22; final update January 19, 2023
- Original Strategic Plan Brochure
- Strategic Plan – Final Update PowerPoint Presentation

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader & Staff	Project Completion Status
1. AMI – Advanced Metering	a. Present a final recommendation for ACSA Board approval to execute a contract for AMI deployment	Board approved contract; final contract being signed, and project scheduling being finalized.	Executed contract.	Quin Lunsford	✓
	b. Develop and execute an “Alpha” Proof of Concept (POC) phase; first phase.	First phase of project. Equipment on order; software and communications testing complete early fall. Two collectors (antennas) and 13 endpoints (meters) installed and tested, POC to be finalized in January 2021.	Successful installation and training of a limited number of collectors, repeaters, and endpoints in a controlled environment; the AMI headend software; and the integration of meter data from the AMI headend to the meter data management system (MDMS). The intent of this phase is to prove out basic network connectivity and system functionality.	Quin Lunsford	✓
	c. Develop and execute a “Beta” POC phase; second phase.	490 meters; successfully deployed April 2021. Successfully deployed all meters sized 1.5” – 4” and completed the areas of Scottsville and most of Crozet. Total number of meters installed through both “Beta” phases is 1,650 meters.	Successful installation and testing of all collectors/repeaters and backhaul infrastructure, field deployment of Beta endpoints, and the balance of system interfaces representing basic functionality, including integration with the ACSA’s billing system.	Quin Lunsford	✓
	d. Develop and execute Full Deployment; third phase.	Installed/retrofitted all large meters (1.5”-4”) in the Spring of 2022. We currently have over 2,140 meters/communication devices deployed; final phase for the remaining 19,500 installation in mid-2023; global chip shortage delays in meter delivery.	Successful installation of remaining meters and endpoints.	Quin Lunsford	●
	e. Develop and deploy a comprehensive customer communication program outlining enhanced functionality the AMI system provides.	Developed and shared a “Public Service Announcement” video illustrating the project and features available to customers.	Communication with our customers via mailer, electronic, and by other means as appropriate outlining: the Customer Portal, leak identification, and enhanced payment options.	Quin Lunsford	✓
	f. Design a training program for field and office staff to support hardware and software associated with the project.	Staff has been trained in analyzing information obtained from currently deployed meters and a comprehensive review of business processes is ongoing.	All staff is able to execute job responsibilities at a high level.	Quin Lunsford	✓

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

<i>Strategy</i>	<i>Implementation Task</i>	<i>Completion Status</i>	<i>Metric</i>	<i>Task Leader</i>	<i>Project Completion Status</i>
2. CityWorks/CMMS	a. CityWorks Initial Install	Completed installation.	CityWorks software installed on servers.	April Walker and Justin Ray	✓
	b. Develop System Design	Completed system design and configuration plan on June 11, 2019.	Completion of System Design & Configuration Plan.	April Walker and Justin Ray	✓
	c. System Implementation	Workflow development, Asset Management and system implementation complete except for the billing software integration. We will integrate with the new billing software solution once that is chosen.	Work orders, service request, integrations, and reports developed and configured.	April Walker and Justin Ray	✓
	d. Staff Training	Staff has been trained on everything and refresher trainings are available through SOPs and video recordings.	Staff trained on how to use CityWorks.	April Walker and Justin Ray	✓
	e. System Acceptance & Go-Live	The majority of the Cityworks project has gone live and is in use across the ACSA. Integration with the billing system will occur once a new system is chosen.	System configuration accepted and staff begins to use the system daily.	April Walker and Justin Ray	✓
	f. Customer Online Service Requests	The customer facing portal is live.		April Walker and Justin Ray	✓
	g. Review and improve annually	Management Reports have been completed and additional reports are created as requested. Dashboards will be developed in 2023.	List of improvements to implement.	April Walker and Justin Ray	✓

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project







In Progress



Completed or Continuing Strategies

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

<i>Strategy</i>	<i>Implementation Task</i>	<i>Completion Status</i>	<i>Metric</i>	<i>Task Leader</i>	<i>Project Completion Status</i>
3. Succession Plans	a. Review current Succession Plan and make edits as needed.	Annual, ongoing activity.	Receive feedback from staff on current plan.	Emily Niziolek	
	b. Identify potential retirement schedule and impact on ACSA.	Several successful succession transitions to ACSA leadership positions.	Review list of retirement schedule.	Emily Niziolek	
	c. Develop and retain target position talent pool.		Develop and train talent pool.	Emily Niziolek	
	d. Review Succession Plan annually.	There were succession plans completed with reviews.	Ensure the ACSA is utilizing the Succession Plan.	Emily Niziolek	

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project



In Progress









Completed or Continuing Strategies

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
4. Best Practices Review	a. Visits to other utilities	AMI visits to two utilities; Best Practices visits summer 2021, to identify teams to visit; delayed by COVID. AMI visits postponed until we advance further with the project. Berkeley Group HR Review; HR Review completed. IT Review and Assessment summer 2021; Data Management virtual tours with Santa Rosa, California and Opelika, Alabama. Virginia Occupational Safety and Health (VOSH) mock inspection conducted May 26, 2021. Mock Inspection and take away items completed.		Lead Team	

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
5. Emergency Response Plan	a. Review Emergency Response Plan (ERP) and make edits as needed.	Completed for 2022.	Review and make edits	Michael Lynn	
	b. Tabletop exercises (internal).	A tabletop exercise was conducted internally on November 1, 2021, with a second tabletop exercise to occur in January 2023 involving both Operations Supervisors.	Plan at least two exercises per year.	Michael Lynn	
	c. Tabletop exercises with City, RWSA and Emergency Manager.	We will be coordinating our Emergency Response Plan in a Regional Dam Exercise in late 2023. This will be an opportunity to work in an emergency exercise with the regional water and public safety agencies.	Plan at least one exercise per year.	Michael Lynn and Engineering	
	d. Checklists training.	Ongoing effective January 2023. Weekly checklist reviews with both Operations Supervisors.	Try to do one checklist per month starting fall 2021.	Michael Lynn	
	e. Develop a tank and facilities weekly inspection form.	Completed and being utilized through Cityworks.	Stations weekly and tanks monthly security checklists.	Billy Defibaugh	
	f. AWIA Certification.	The Vulnerability Assessment (VA) Certification was completed on by December 1, 2020; with the Emergency Response Plan (ERP) Certification completed on May 1, 2021. Recertification will be required by December 2025.	Completed VA 12/1/20; ERP 5/1/21.	Gary O'Connell	

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project



In Progress



Completed or Continuing Strategies

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
6. Implement New Financial System	a. Procure consulting services related to an ERP system replacement.	Scope of services developed; contract to procure services completed.	Executed contract with GFOA consultants.	Quin Lunsford	✓
	b. ERP consulting engagement to analyze business process, provide business case recommendations, develop RFP for ERP solution, support in selecting the most highly rated ERP, and contract negotiations.	Next steps in the ERP process scheduled to be developed by late summer.	Develop a map of all business processes and begin discussions related to improvement opportunities.	Quin Lunsford	✓
		Business Process Review completed.	Conduct an analysis to benchmark existing processes against recognized public sector best practices and develop process recommendations for improvement.	Quin Lunsford	✓
		Future Business Process review with system needs development.	Identify potential changes to the business processes identified above based on best practices ERP functionality and how these features are best utilized in other public sector organizations.	Quin Lunsford	✓
		Scope of RFP (Request for Proposals) developed and RFP advertised. Highest rated proposals evaluated by ACSA committee and interviewed.	Prepare an overall procurement strategy to define the scope of the software RFP and a specific plan for moving forward into the procurement process.	Quin Lunsford	✓
		Selection of highest rated proposer completed in early 2021 for final selection and contracting.	System selection and contract negotiations with selected vendor, resulting in an executed contract for full ERP.	Quin Lunsford	✓
	c. Install and begin implementation.	FY 2021, ongoing. Completed 12/31/21.	Operable system installed, with multiple testing environments to ensure agreed upon functionality.	Quin Lunsford	✓
	d. Complete system implementation and integration with other ACSA information systems (billing, CMMS, etc.).	Completed. System went "live" 1/1/2022.	Reliable operation of newly implemented system with verifiable information output.	Quin Lunsford	✓

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

<i>Strategy</i>	<i>Implementation Task</i>	<i>Completion Status</i>	<i>Metric</i>	<i>Task Leader</i>	<i>Project Completion Status</i>
7. Implement IT Risk Assessment Action Plan	a. Network Redundancy	Report to Board December 19, 2019; action plan being implemented; completed.	All major network components have redundancy and a formalized replacement plan.	April Walker	✓
	b. Physical Access Security Improvements	Completed.	Physical access policies created, and additional physical security measures implemented.	April Walker	✓
	c. Secure Data Access	Completed.	Formal vendor access policies and procedures created.	April Walker	✓
	d. Phone System Redundancy	Completed.	Failover phone system implemented and tested.	April Walker	✓
	e. IT Security Assessment Update/Review	Revisit all aspects of ACSA Cybersecurity including third-party vendors and RWSA. Completed a Cybersecurity Assessment and Penetration Test in 2021.	Recommendations and implementation.	April Walker	✓

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project



In Progress



Completed or Continuing Strategies

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
8. Operations Center Expansion Plan	a. Develop a Master Plan for Operations Center Expansion with Term Contract Consultant.	Completed.	Final Master Plan Report is complete.	Jeremy Lynn and Alex Morrison	✔
	b. Design and construct Phase 1 of the Operations Center Expansion Plan.	Completed.	Construction of Operations Center Expansion Phase 1 is complete.	Jeremy Lynn and Alex Morrison	✔
	c. Design and construct the Avon Street Maintenance Yard.	Final site plan was submitted to Albemarle County in October 2022. Estimated construction completion is FY 2024.	Construction of Avon Street Maintenance Yard Phase 1 is complete.	Jeremy Lynn and Alex Morrison	●

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
9. Managing and Utilizing Data	a. Identify critical data and information.	Future project; post AMI/CMMS/Financial System completion; IT consultant will assist in developing a data management strategy and security compliance.	Detailed list of critical data and information.	Quin Lunsford and April Walker	✓
	b. Develop comprehensive understanding of how data and information is collected.	A Data Warehouse Project is planned in FY 2023 to assist with what data is collected and how it is used.	Detailed recovery strategies for all critical business processes documented.	Quin Lunsford and April Walker	●
	c. Develop Business Continuity Plan (BCP)	Part of the Emergency Response Plan.	Business Continuity Plan (BCP) created.	Quin Lunsford and April Walker	●
	d. Test and train.		Training/testing exercises developed and performed.	Quin Lunsford and April Walker	●
	e. Develop recovery strategies for recovering critical business processes.	IT is working on a documented Disaster Recovery Plan and SOPs with testing of the Disaster Recovery Plan planned. The ERP and AMI are cloud solutions to limit any downtime and IT has developed offline GIS mapping to assist in an emergency situation where network or cellular data may not be available. The Avon Street Property is being designed to serve as a redundant server room so that data is duplicated to both locations.	Identify and implement.	Quin Lunsford and April Walker	●

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project









In Progress



Completed or Continuing Strategies

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
10. Water Audit - Annual	a. Conduct Water Audit of Crozet Water System when 12 full months of data is available for the finished water meter at the RWSA Crozet Water Pump Station.	Completed.	Initial Water Audit of Crozet Water System is completed.	Jeremy Lynn	
	b. Conduct Water Audit of Urban Water System when 12 full months of data is available for the RWSA Wholesale Water Meters.	ACSA staff have begun conversations with RWSA and the City in collaborating on an Urban System Water Audit. A meeting will be scheduled in January 2023.	Initial Water Audit of Urban Water System is completed.	Jeremy Lynn	
	c. Conduct Water Audit of Scottsville Water System when 12 full months of data is available.	Completed.	Initial Water Audit of Scottsville Water System is completed.	Jeremy Lynn	
	d. Establish Water Audit working group with representation from multiple departments to identify sources of non-revenue water (NRW) and quantify real losses and apparent losses.	Annual Water Audits for Crozet and Scottsville have been completed and an audit of Red Hill is currently underway.	Working group is formed with representatives from Engineering, Maintenance, Finance and IT. A Water Balance Sheet is completed for each Water Audit. Develop cost-effective NRW reduction strategies.	Jeremy Lynn	
	e. Obtain validation per AWWA standards for Water Audits of each water system.	This task may no longer apply, as I do not believe AWWA validates utility water audits anymore.	Water Audits are validated for Crozet, Scottsville, and Urban Water Systems.	Jeremy Lynn	
	f. Conduct annual Water Audit for each water system.	Completed.	Annual Water Audit schedule is maintained for each water system.	Jeremy Lynn	

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project



In Progress







Completed or Continuing Strategies

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
11. Energy Audit	a. Issue a RFP to one of our Term Contract Consultants to conduct facility-wide Energy Audit.	Completed.	Proposal is approved and funding is appropriated.	Alex Morrison and Jeremy Lynn	
	b. Energy Audit is conducted for the Operations Center and all pump stations to evaluate current energy consumption and identify how systems or procedures might be altered to improve energy conservation.	Comments on the Draft Report were returned to Ramboll in November 2022.	Final Report with recommendations is received and approved.	Alex Morrison and Jeremy Lynn	
	c. Develop scope of work and preliminary cost estimate for each CIP project identified by final Energy Audit Report.	Energy Conservation Measures have been identified and preliminary costs estimates will be included in the final approved report.	All projects recommended are added to the CIP.	Alex Morrison and Jeremy Lynn	
	d. Issue RFP for the design of each CIP project recommended.		Project design is completed for each CIP project and is ready to bid.	Alex Morrison and Jeremy Lynn	
	e. Construct and institute all energy conservation measures for Operations Center and pump stations.		Construction and implementation of all energy conservation measures is complete.	Alex Morrison and Jeremy Lynn	

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
12. Business Continuity Plan	a. Identify critical business processes.	COVID Response Plan quickly implemented in early stages of pandemic.	Detailed list of critical business processes created.	Quin Lunsford and April Walker	
	b. Develop recovery strategies for recovering critical business processes.	IT is developing a documented and tested Disaster Recovery Plan with SOPs and testing of the Disaster Recovery Plan is planned. The ERP and AMI are cloud solutions to limit any downtime and IT has developed offline GIS mapping to assist in an emergency situation where network or cellular data may not be available. The Avon Street Property is being designed to serve as a redundant server room so that data is duplicated to both locations.	Detailed recovery strategies created for all critical business processes documented.	Quin Lunsford and April Walker	
	c. Develop Business Continuity Plan (BCP)		Business Continuity Plan created.	Quin Lunsford and April Walker	
	d. Test and Train		Training/testing exercises developed and performed.	Quin Lunsford and April Walker	

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

<i>Strategy</i>	<i>Implementation Task</i>	<i>Completion Status</i>	<i>Metric</i>	<i>Task Leader</i>	<i>Project Completion Status</i>
13. Annual Market Rate Recommendations	a. Develop formal policy on annual market rate adjustment.	Completed.	Conduct an analysis to identify best practice factors on market adjustments.	Emily Niziolek	✓
	b. Present policy to Board for approval.	Completed.	Final policy shared with Board.	Emily Niziolek	✓
	c. Review and have Board approve annually.	Completed.	Board approval every June with Budget.	Emily Niziolek	✓

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project



In Progress



Completed or Continuing Strategies

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

Strategy	Implementation Task	Completion Status	Metric	Task Leader	Project Completion Status
14. Review Pay Plan and Personnel Management Plan – Study with recommendations	a. Review all ACSA job descriptions and update as needed.	Completed.	Review and update.	Emily Niziolek	✓
	b. Procure consulting services related to Compensation and Classification Plan.	Completed.	Executed contract with consultant .	Emily Niziolek	✓
	c. Consultant to review current Compensation Plan and provide recommendations.	Completed.	Final report with recommendations.	Emily Niziolek	✓
	d. Implement consultant recommendations.	Completed pay recommendations. All job descriptions and evaluation forms have been updated, including the consultant recommendations.	Review changes with Employees and Board.	Emily Niziolek	✓
	e. Update Personnel Management Plan	Completed.	Board approved June 17, 2021.	Emily Niziolek	✓
	f. Employee Handbook	Develop draft for review by June 2023.	Finalize to employees.	Emily Niziolek	●

Project Completion Status:



Not Started



Behind Schedule or an Upcoming Project



In Progress



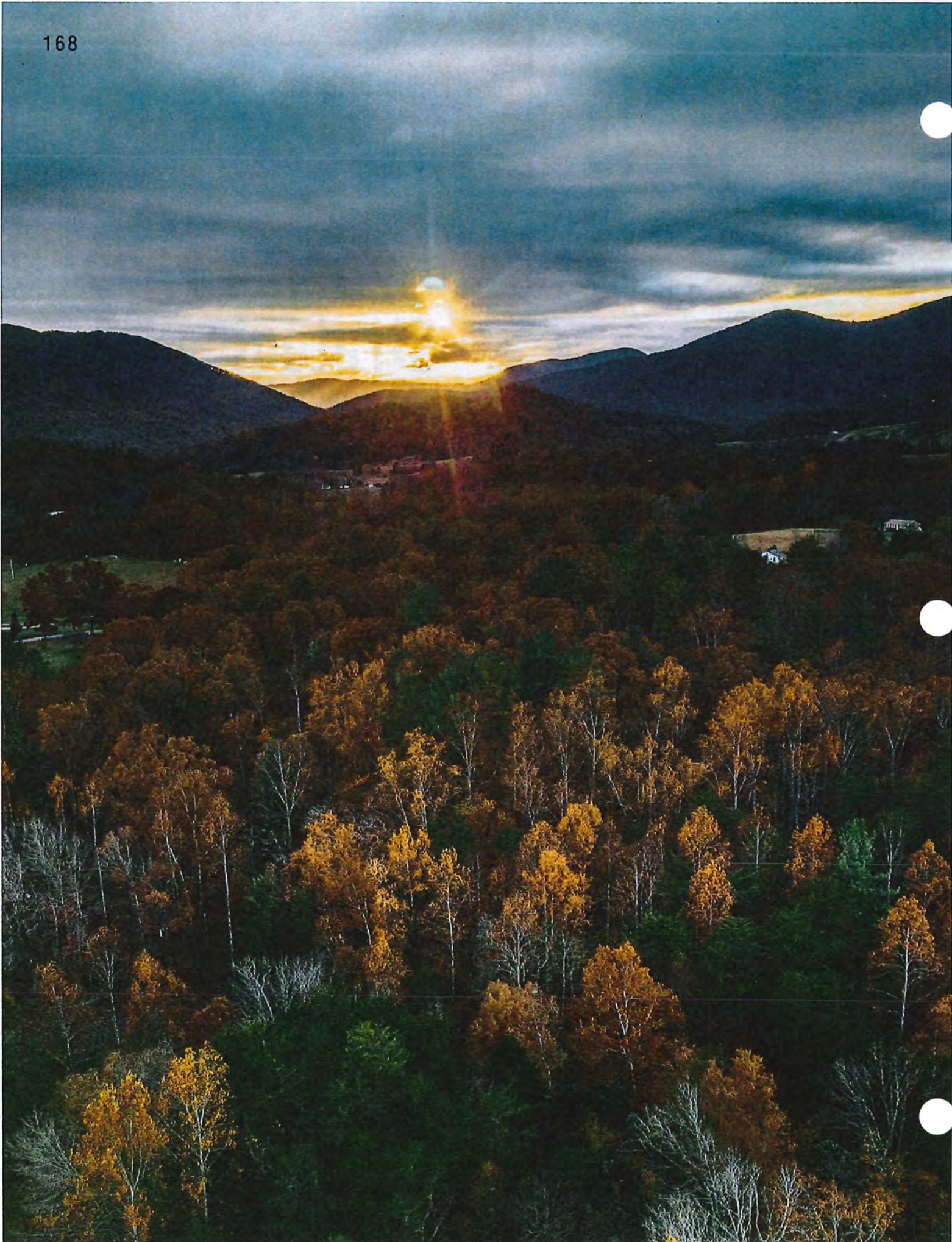
Completed or Continuing Strategies



2020 – 2022 Strategic Plan

**Serve & Conserve Today.
Sustain Tomorrow.
Protect Our Resources Forever.**

www.serviceauthority.org



Chair's Message



Clarence W. Roberts
Chair of the Board,
Albemarle County
Service Authority

The Albemarle County Service Authority (ACSA) is emerging into a period that offers vast opportunities and enormous challenges that will be difficult to navigate without careful planning and a clear vision for the future.

That vision is encapsulated in this 2020-2022 Strategic Plan, which will guide us into the future. The ACSA's Board of Directors and Management Team collaborated to assess key industry trends and gaps in service to identify the critical factors important to ACSA's long-term success.

We have a strong course of action with clear goals and objectives. The detailed steps for implementation and monitoring will guide ACSA's progress for years to come.

I look forward to working with the Board and our Management Team to ensure ACSA reaches its full potential on behalf of our customers.

Executive Director's Message



Gary O'Connell
Executive Director,
Albemarle County
Service Authority

It has been a great pleasure to work with the Board of Directors and ACSA staff to examine our organizational goals and set a strategic direction that will ensure we remain accountable to our customers and meet the challenges that lie ahead, which range from meeting federal mandates to repairing our aging infrastructure and replacing a maturing, knowledgeable workforce. One goal has never changed: providing safe, clean, reliable Albemarle water.

This 2020-2022 Strategic Plan is a blueprint for excellence in customer service, technology, and environmental sustainability. The services we provide are vital to every person, business, and community in Albemarle County. We will use this plan as a clear roadmap for efficient and effective performance; financial responsibility; outreach and leadership; and high-quality water.

We look forward to the actions we will take, and the impacts we will have, in making sure that every dollar invested in us by our customers goes farther, as we improve our services to them and the rest of our community.

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| 14 The ACSA So Far | 15 ACSA Board & Management Team | |

The Albemarle County Service Authority (ACSA) distributes treated water and collects sewage for treatment, while maintaining, expanding, and replacing the infrastructure within the service area. We were created by the County Board of Supervisors in 1964 with the Crozet community as its sole customer.

In the 1960s the South Rivanna Dam was constructed and several subdivisions were developed throughout the County, such as Carrsbrook, Woodbrook, Westmoreland, Northfields, Berkeley, Hessian Hills, Montvue, Colthurst, Flordon and West Leigh.

Who We Are

In the late 1960s and early 1970s, these systems were acquired by the County for the ACSA, and the County purchased water from the City of Charlottesville supply to provide all these areas with public water, and eliminate their well systems. In 1973, the Rivanna Water and Sewer Authority (RWSA) was formed and became the wholesale provider of water and wastewater treatment for the City and ACSA.

The ACSA, now more than 50 years later, provides water distribution and wastewater collection services to more than 20,000 customers. The community enjoys water drawn from a protected watershed contained almost entirely within the County's borders.

We maintain close to 350 miles of water lines and nearly 300 miles of sewer mains, including those serving the urban areas of Albemarle County, and nearby communities of Scottsville and Crozet.



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.



2020 – 2022 Strategic Plan: Our Planning Process



With the successful completion of the Albemarle County Service Authority's 2013-2018 Strategic Plan, the leadership of the ACSA set their sights on proposing and implementing a new, three-year Strategic Plan for 2020 through 2022. The plan is specifically focused on major projects that will move us forward and lay the groundwork for a successful decade and beyond.

Most strategic plan processes review a utility's strategic issues and identify gaps so they can be addressed. For the ACSA, we have identified such areas that we believe can be attended to within the three-year timespan of the plan, and advance us forward for the future. They are our Advanced Metering Infrastructure - AMI for short - and a new Computerized Maintenance Management System, or CMMS.

Before we discuss these initiatives in greater detail, we at the ACSA wanted to detail how we came to determine that these two projects, along with several other topics to tackle, which would serve as the heart of our plan.

The ACSA developed our 2020-2022 Strategic Plan using the following utility best practices to help identify gaps in our services:

UTILITY BENCHMARKING:

The ACSA was one of 129 nationwide utility participants in the 2017 American Water Works Association's (AWWA) Utility Benchmarking Program. AWWA leads the water industry as the largest nonprofit scientific and educational association in the world. It is dedicated to helping its more than 4,000 utility members with the management and treatment of their water and wastewater.



Our Planning Process

The utility benchmarking program provided the ACSA with a holistic view of the organization. We are proud to tell you we ranked high in strategic planning and strategic plan implementation; long-term financial planning; risk management (emergency planning); governing body transparency and accountability; drought response/water shortage contingency plan; source water protection plan; and leadership effectiveness.

Some areas for improvement were found and they included our current CMMS platform and our customer involvement program, both of which are addressed in the AMI and CMMS projects.

EFFECTIVE UTILITY MANAGEMENT (EUM):

The ACSA staff used the Effective Utility Management (EUM) ranking process to look at current management areas and rank criteria for current or expected challenges. EUM is a nationally recognized strategic planning tool used by U.S. EPA, AWWA, the Water Environment Federation and other top water organizations to use as an organizational self-assessment.

EUM focuses on ten key management dimensions, including 1) water resource and supply adequacy; 2) water quality – clean and safe water; (3) customer satisfaction; (4) community sustainability and economic development; (5) employee and leadership development; (6) financial viability; (7) operational optimization; (8) infrastructure stability; (9) operational resiliency – vulnerability assessment; and (10) community and customer stakeholder understanding and support.

BEST PRACTICES REVIEW PANEL:

Three experienced utility managers from outside of the ACSA spent two days reviewing the utility. The panel highly rated the ACSA in a number of management areas. They identified two areas for the ACSA to strategically address: Advanced Metering Infrastructure and Computerized Maintenance Management.



Our Planning Process

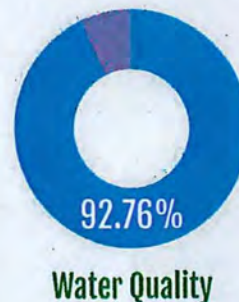
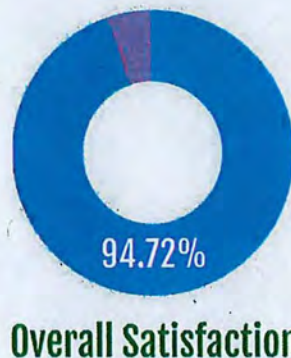
ACSA CUSTOMER SURVEY:

ACSA staff developed a survey for our customers to gain their feedback and input to inform our strategic planning process. Nearly 1,200 customers responded and we are pleased to report the results showed a high level of customer satisfaction. When it came to overall satisfaction with the ACSA, 94.72% of our customers approved of how we conduct ourselves.

There is always more to improve and our customers did express a strong desire to receive water leak notifications, as well as wanting a new customer portal to manage their accounts. These asks are components of the AMI project.



2019 Customer Survey Results (% Satisfied)



EMPLOYEE INPUT:

To inform the 2020-2022 Strategic Plan from the employee point-of-view, the ACSA used an extensive employee survey and a series of staff meetings to gain their knowledgeable feedback.

The results mirrored the AWWA's findings. While our employees rated the utility high in a number of areas, they honestly expressed concerns in the areas of AMI and CMMS. We also reviewed the ACSA's present Vision and Values statements.



A photograph of a winter scene. A path leads through a line of bare trees towards a body of water. A wooden fence runs along the left side of the path. The ground is covered in snow, and the sky is a clear, pale blue. The overall mood is serene and quiet.

2020 – 2022 Strategic Plan: Major Initiatives

Major Initiatives

Advanced Metering Infrastructure (AMI)

The first of the ACSA's two major projects under the 2020-2022 Strategic Plan is the implementation of advanced metering infrastructure (AMI) throughout our water system.

Advanced metering infrastructure (AMI) is an integrated system of technologically advanced water meters, communications networks, and data management systems that enables enhanced two-way communication between utilities and their customers. This upgrades the customer experience, supports green initiatives, adds efficiencies, and provides strategic information for utility decision-making.

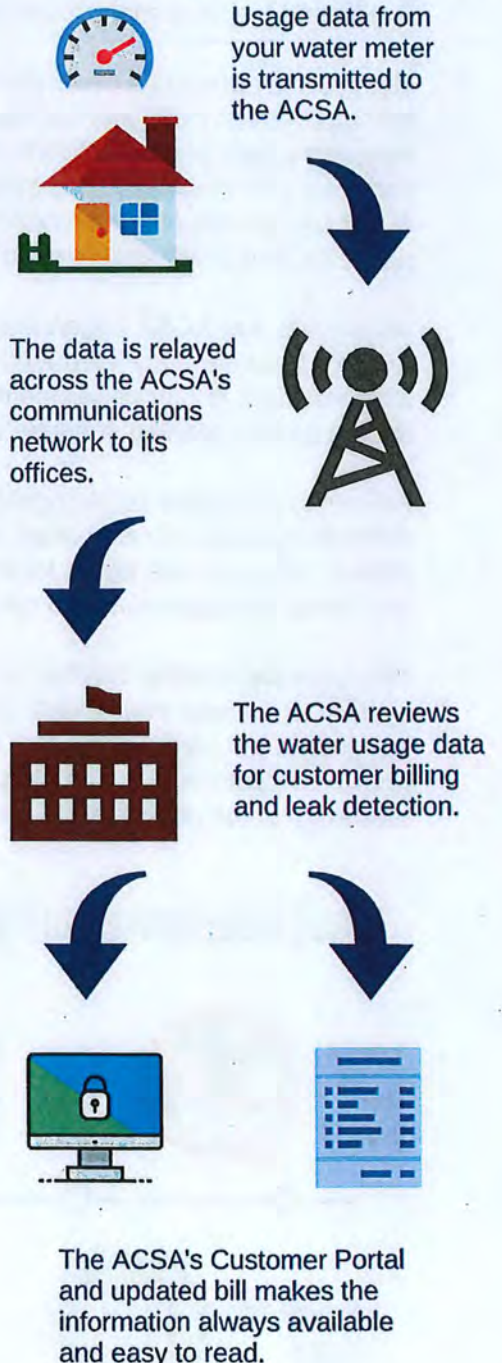
With AMI, customers can gain 24/7 access to their water usage through a web portal accessible through their computer or smartphone and choose to receive text or email alerts about leaks or unusual usage. AMI also improves communication between customers and billing staff; both can look at the same real-time data while discussing accounts.

A major benefit of implementing AMI is the reduction of water wastage. Customers are provided with a more accurate picture of their water use, enabling them to adjust it as desired. Both the ACSA and our customers can check their usage more often, allowing leaks to be found in minutes, enabling repairs to take place before volumes of water are wasted and large bills are received.

The ACSA gains a major operational advantage with AMI: the increased ability to monitor water usage remotely without the expense of sending meter readers into the field, saving energy costs and reducing employee risk. To properly evaluate our enlistment of AMI, the ACSA conducted a feasibility study to ensure an investment in AMI would provide us with our desired outcomes. The report detailed how AMI would positively impact: customer service; the availability and usability of information; engineering and revenue analytics; automation and systems integration; and the billing process.

Following the feasibility report, the ACSA's Board approved a recommended approach and deployment timeline in line with the Strategic Plan. The process will enable the ACSA to fully maximize its use of the new technology.

How AMI Works



Major Initiatives

Computerized Maintenance Management System (CMMS)

Computerized Maintenance Management Systems (CMMS) enable utilities to schedule, track, and monitor maintenance activities to provide cost, inventory, personnel, and reporting history. It will improve the overall efficiency of utility operations and will apply the latest technologies toward streamlining operational processes.

The ACSA, through its benchmarking work with AWWA, determined that its current maintenance management system was not meeting the long-term needs of the utility. Its reliance on manual data entry, lack of connection to our Geographic Information System (GIS), and lack of a web portal for customer service requests impose a time-consuming and inefficient system on our staff. A key component of the new CMMS will be its near-real-time updating of customer service requests, which will enable us to better track their progress through to the completion of the work.

As a result, the ACSA began moving towards the acquisition of a successful CMMS solution. The ACSA's board appropriated funds to enable staff to move forward with the procurement of a utility-wide solution. Every department from within the ACSA was represented on a team focused on finding a class-leading software solution and enabling its proper implementation.

Following a transparent proposal process, Cityworks was selected because it provides a centralized database with direct integration with the ACSA's GIS system. The new system will offer a customer web portal for the 24/7 creation of customer service requests; improved inventory and asset management; and enhanced tracking of work orders and asset inspections.

The software is being configured to help seamlessly transfer our business processes from the old system to the new one, adapting them to take full advantage of the new CMMS system. The integration will take place under the 2020-2022 Strategic Plan. The end result of this effort? Improved customer service. Improved tracking and usage of the ACSA's assets. Improved efficiency in the performance of our duties.

What A Computerized Maintenance Management System (CMMS) Does:



Additional Areas of Focus

The 2019-2022 Strategic Plan will not just direct attention to the AMI and CMMS projects, but it will also aim to address multiple goals that will set the utility on a positive course for the future.

Among the added areas of focus under the plan are the following:

Succession Planning: Utilities across the country are facing the impacts of an aging workforce and loss of institutional knowledge. The ACSA will continue its succession planning efforts, using mentoring and professional development initiatives to prepare the ACSA for future waves of managerial retirement.

Best Practice Inclusion: The ACSA will continue striving to learn from the best in the water utility business, scheduling best practices utility visits to engage with leaders from other jurisdictions.

Emergency Response Plan: Under the America's Water Infrastructure Act, the ACSA will complete training and checklists and our emergency preparedness to avoid water disruptions to our customers, building on our goal to be a highly reliable water provider. We will also incorporate a formal business continuity plan for operations in times of crisis, adding to system reliability.

Improved Data Management and Utilization: The ACSA will explore the creation of a strategic implementation plan to best manage for upcoming data: GIS, Financial, SCADA, CMMS, AMI, and System Modeling. We'll also implement an updated financial system.

Implementation of IT Risk Assessment: The ACSA is taking a proactive approach to cybersecurity, implementing measures to further protect our computer/IT assets and data.

Facility Master Planning: A long-term plan to ensure the ACSA can and will grow to meet the operational requirements to provide high-quality customer service.

Water and Energy Audits: The ACSA will incorporate utility best practices to reduce water loss using tools to identify water leaks throughout our system. The first audit is scheduled for 2020 and is expected to be carried out on an annual basis. The ACSA will also research and establish an energy efficiency initiative.

Employee Pay Plans: The ACSA, in addition to its succession planning, will conduct annual, "market rate" recommendations to stay competitive as an employer in our area. We will emphasize competitiveness and internal equity in an effort to keep top performers working on behalf of our customers to provide the best service possible.



The ACSA So Far

20,252 Customer Accounts

75,373 Residents Served

1.7 BILLION Gallons Sold (2019)

50.4 Square Miles Covered

353 Miles of Water Mains

298 Miles of Sewer Mains

2,747 Fire Hydrants

10,250 Valves Maintained

9,153 Sewer Manholes

21 Pumping Stations

8 Water Tanks

ACSA Board & Staff

Board of Directors

Chair: Clarence Roberts, Rivanna District
 Vice Chair: Jennifer Sulzberger, Samuel Miller District
 Richard Armstrong, Scottsville District
 Bill Kittrell, White Hall District
 Kimberly Swanson, Rio District
 Charles Tolbert, Jack Jouett District

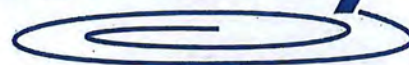
Legal Counsel: James M. Bowling, IV
 Executive Director: Gary O'Connell



Staff



Albemarle County
Service Authority
Serving • Conserving



168 Spotnap Road
Charlottesville, VA 22911
Phone: (434) 977-4511
Fax: (434) 979-0698

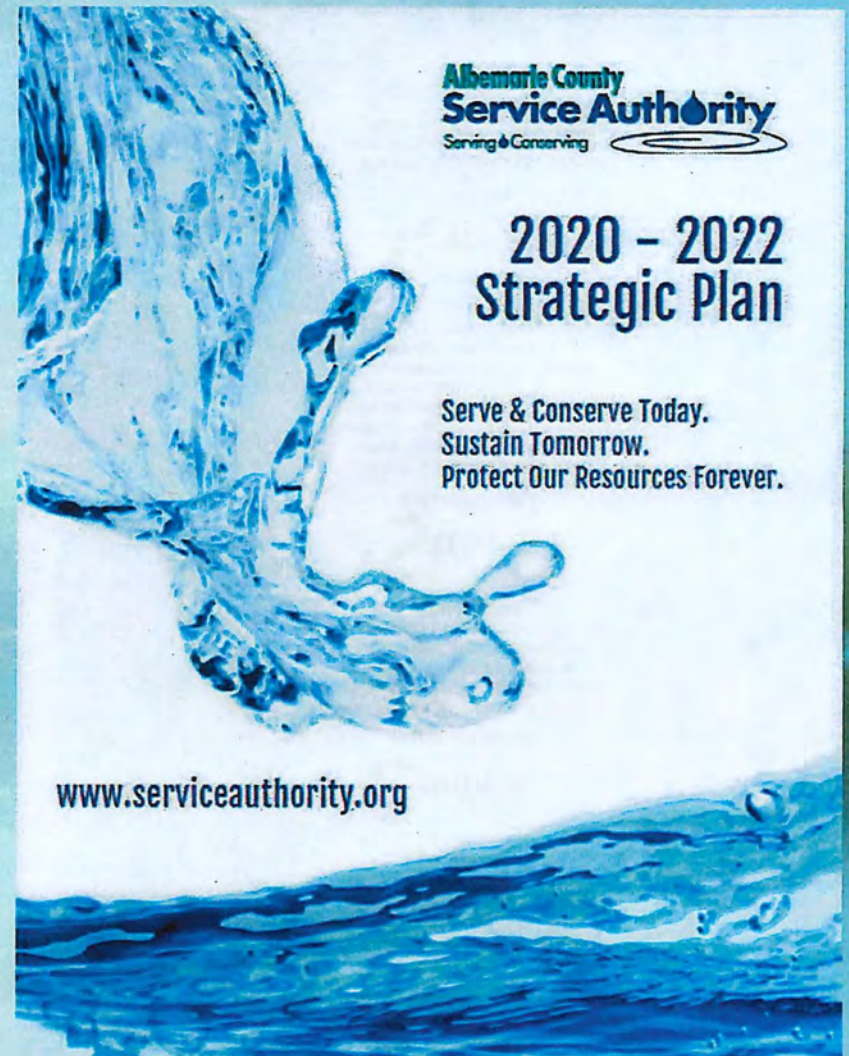
www.serviceauthority.org

STRATEGIC PLAN

FINAL UPDATE

ACSA Board of Directors' Meeting

January 19, 2022



Our Vision

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Our Mission

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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.

- The first of the ACSA's two major projects under the 2020-2022 Strategic Plan is the implementation of Advanced Metering Infrastructure (AMI) throughout our water systems.
- Advanced Metering Infrastructure (AMI) is an integrated system of technologically advanced water meters, communication networks, and data management systems that enables enhanced two-way communication between utilities and their customers. This upgrades the customer experience, supports green initiatives, adds efficiencies, and provides strategic information for utility decision-making.
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ALBEMARLE COUNTY SERVICE AUTHORITY

AGENDA ITEM EXECUTIVE SUMMARY

<p>AGENDA TITLE: Imagine a Day Without Water Student Art Contest Winners</p> <p>STAFF CONTACT(S)/PREPARER: Emily Roach, Director of Human Resources and Administration <i>ER</i></p>	<p>AGENDA DATE: January 19, 2023</p> <p>ACTION: Informational</p> <p>ATTACHMENTS: Yes</p>
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BACKGROUND: The ACSA, RWSA, and the City of Charlottesville partnered in their eighth annual Imagine a Day Without Water campaign this year, to educate and inspire the community about the value of water. The goal of this campaign is to encourage water conservation in our everyday lives.

This year's national Imagine a Day without Water campaign was reframed to **Imagine a Day With(out) Water**. For many Americans living a day without water is a reality and not something they need to imagine. Whether it is a drought, contaminated water source, or inability to pay a water bill, access to safe, clean drinking water is unfortunately not something everyone can depend on. This year we joined the national call to action for the need of sustainable, equitable, and safe drinking water for all.

In addition to public awareness, the campaign consists of an art contest inviting youth from the City and Albemarle County to illustrate a particular theme related to water conservation. This year, the theme was "Value of Water." To follow proper COVID-19 safety precautions, the competition accepted traditional as well as digital submittals. Judges from the City, ACSA, and RWSA evaluated the artwork for creativity, originality, and incorporation of the contest's theme.

There were 248 art entries received, with one winner chosen from each of the five grade divisions between kindergarten and 12th grade. The public was also invited to view the top 69 entries online and vote for a "Fan Favorite." All six winners received a \$200 gift card and a water conservation goodie bag.

BOARD ACTION REQUESTED: Informational; presentation of artwork and video at the Board meeting.

ATTACHMENTS:

-2022 Imagine a Day Without Water Art Contest Winners

2022 Imagine a Day without Water Art Contest Winners



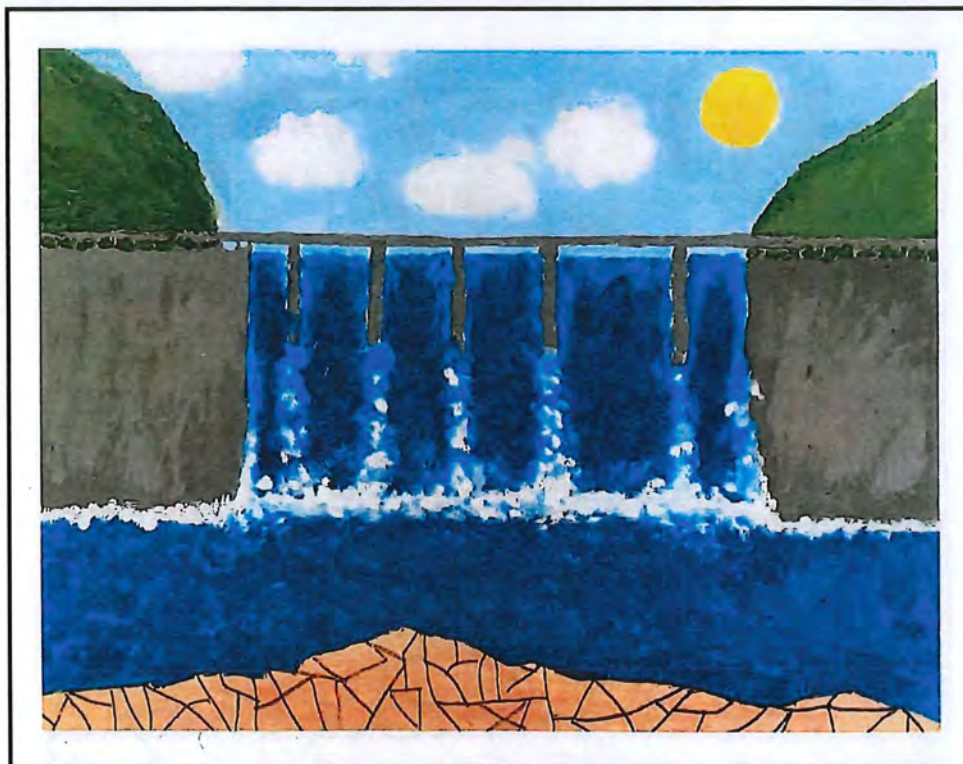
K - 2nd Grade Winner: Merrick Meslar, Murray Elementary School, Grade K



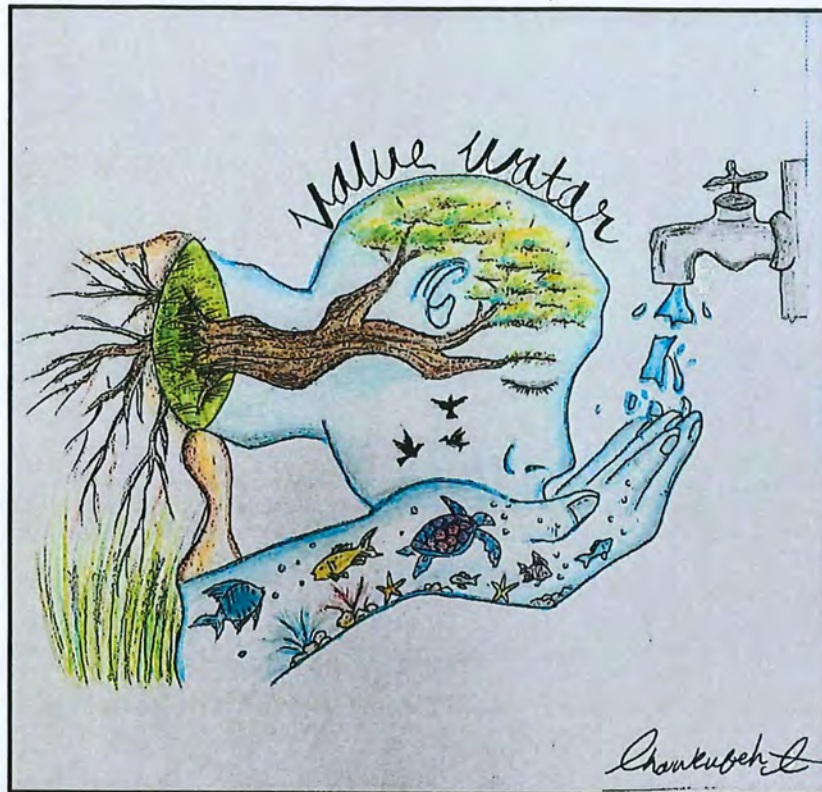
3rd - 4th Grade Winner: Zaina Ornan, Free Union Country School, Grade 4



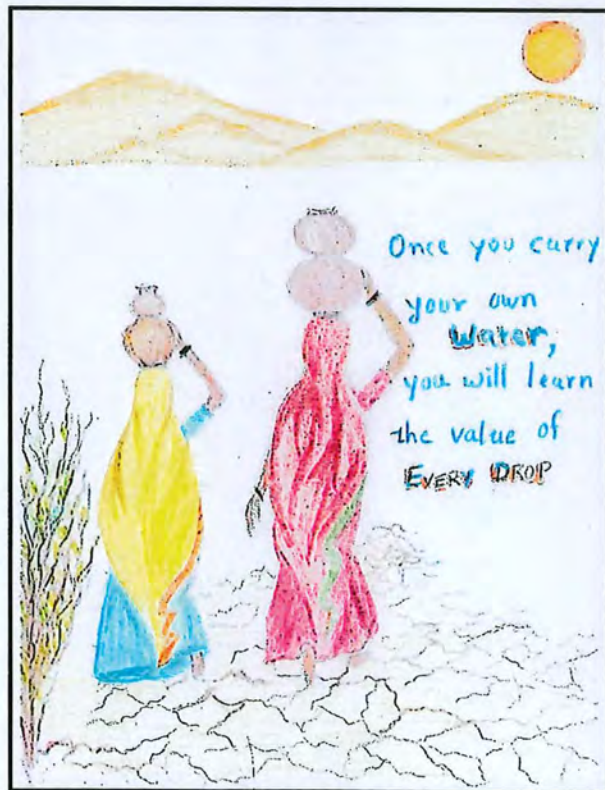
5th – 6th Grade Winner: Olivia Rice, Stony Point Elementary School, Grade 5



7th – 8th Grade Winner: Seamus Brown, Mountaintop Montessori, Grade 8



9th - 12th Grade Winner: Shoukufeh Alizada, Charlottesville High School, Grade 9



Fan Favorite Winner: Kush Jani, Albemarle High School, Grade 12 (not finalized)