

**Albemarle County Service Authority Board of Directors**

1           The Board of Directors of the Albemarle County Service Authority  
2 (ACSA) met in a regular session on November 17, 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; Mr. John Parcels; Mr. Clarence Roberts, Chair; Mr. Charles  
7 Tolbert, Vice-Chair.

8           **Members Absent:** None.

9           **Staff Present:** Jeremy Lynn, Michael Lynn, Quin Lunsford, Alex Morrison,  
10 Eric Nutter, Gary O’Connell, Jennifer Bryant, Tonya Foster, Emily Roach,  
11 Danielle Trent, April Walker, Theresa Whiting, Justin Weiler, Deanna  
12 Davenport.

13           **Staff Absent:** James Bowling.

14           **Public Present:** Mike Derdeyn, Flora Pettit PC; Neil Williamson, Free  
15 Enterprise Forum (virtual); Matt Heatwole, Brown Edwards, LLC.

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 \_\_\_\_\_).

21  
22           2.       Recognitions – Employee Training

23           Mr. O’Connell stated that he would like to start recognizing  
24 employees for various trainings they complete. He stated that several  
25 ACSA employees attended a state conference with the Virginia Rural  
26 Water Association (VRWA). He stated that Mike Lynn, Director of  
27 Operations, gave a presentation on the ACSA’s asbestos-cement pipe  
28 repair program, and the specialized equipment that is used. He stated that  
29 he wanted to thank Mr. Lynn for representing the ACSA well at that event.  
30 He mentioned that Mr. Lynn has also given a number of presentations to

**Albemarle County Service Authority Board of Directors**

1 the VRWA and nationally, on emergency preparedness and is an expert in  
2 the utility operations field with regard to the subject.

3 Mr. O’Connell stated that Operations Supervisor Roland Bega and  
4 Crew Leader II William Roach also represented the ACSA in a Q&A  
5 session that was held at a VRWA meeting about hydrants, leak repairs,  
6 and valve maintenance. He mentioned that the ACSA is a leader in best  
7 practices in its field operations and the two did a great job representing  
8 that. He noted that they were also, as a team, the winners of the tapping  
9 contest that occurs, and have been for a number of years. He added that  
10 some of that tapping demonstration done at the contests is being used to  
11 train new employees at the ACSA.

12 Mr. O’Connell stated that the ACSA has also had several  
13 employees in the past month or so, that have participated in the University  
14 of Virginia Darden School’s leadership development programs. He  
15 mentioned that Director of Finance, Quin Lunsford, is participating in the  
16 executive program. He noted that Director of IT, April Walker, and Director  
17 of Human Resources and Administration, Emily Roach, both participated in  
18 the women’s leadership program. He stated that the programs are high-  
19 quality and intense, and those that have participated in them have had  
20 great success and learned a lot.

21 Mr. Roberts thanked all the staff for their extra effort. He stated that  
22 the training will greatly enhance the ACSA’s leadership. Mr. Parcels added  
23 that he thinks it is good that the ACSA permits and encourages these types  
24 of programs, as it is a benefit to the employee and the organization as well.

25  
26 3. Approve Minutes of October 20, 2022

27 There were no corrections or additions to the minutes of October  
28 20, 2022.

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

**Albemarle County Service Authority Board of Directors**

1           4.       Matters from the Public

2                   There were no matters from the public.

3  
4           5.       Response to Public Comment

5                   There was no response to public comment.

6  
7           6.       Consent Agenda

8           **a. Monthly Financial Reports** – Mr. Parcels stated that the arrearages  
9                   continue to decrease and commended the staff. Mr. O’Connell noted  
10                  that it has taken a huge amount of work.

11           **b. Monthly CIP** –

12           **c. CIP Authorizations** –

13           **d. Rivanna Water and Sewer Authority (RWSA) Update** –

14           **e. ACSA Board Policy Future Issues Agenda 2022** –

15           **f. Advanced Metering Infrastructure (AMI) Project Update** – Mr.  
16                  Parcels stated that there is a remark in the update about flaws in some  
17                  of the meters that are in place, and that they are being corrected. He  
18                  asked if there was a way to preemptively ensure the flaws have been  
19                  fixed in the new meters coming in. Mr. Lunsford replied yes. He stated  
20                  that the manufacturing defect referenced in the update memo was  
21                  found in a certain size meter, during a certain time period. He noted  
22                  that the ACSA installed all of its 1 ½ - 4-inch meters earlier this year,  
23                  and the problem was isolated to a portion of that group of meters. He  
24                  stated that some of the meter registers have been successfully  
25                  replaced and the ACSA has received another 60 that are currently  
26                  being installed. He added that they expect to have the issue  
27                  completely resolved soon.

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

**Albemarle County Service Authority Board of Directors**

1           7.       Annual Financial Report

2                   Mr. O'Connell stated that every year, this report is presented to the  
3           ACSA's Board of Directors Audit Committee, which includes Mr. Tolbert  
4           and Mr. Parcels, who met with the auditors and ACSA financial staff. He  
5           stated that Quin Lunsford would introduce the item and the auditing firm,  
6           Brown Edwards. He mentioned that a representative from Brown Edwards  
7           would walk the Board through the report.

8                   Mr. Lunsford stated that he would introduce Matt Heatwole, who is  
9           a partner with Brown Edwards and in charge of the ACSA's engagement.  
10          He stated that Mr. Heatwole met with Mr. Tolbert and Mr. Parcels last  
11          week to comprehensively review the financials. He mentioned that Mr.  
12          Heatwole will present Brown Edwards' reports to the full Board, followed by  
13          a short presentation from himself.

14                  Mr. Heatwole stated that the Board should have a bound report  
15          included in their Board packet. He mentioned that in that report is their  
16          audit opinion. He stated that he was happy to report that Brown Edwards is  
17          issuing an unmodified, or clean, audit opinion. He noted that the opinion  
18          format has changed a bit, in that their opinion is the first paragraph and  
19          there is a lot more explanation as well. He stated that in the back of the  
20          report is what they call their yellow book audit opinion. He mentioned that  
21          the purpose of this is to disclose any items that came to their attention that  
22          could be considered material weaknesses or significant deficiencies in  
23          internal control. He stated that he is happy to report there were none of  
24          those.

25                  Mr. Heatwole stated that the last item provided is a bound copy of the  
26          management letter. He stated that it is a tool for management that includes  
27          best practice suggestions, as well as a discussion of upcoming standards  
28          which are always in the que. He added that there is also a letter included  
29          called Required Communication with those Charged with Governance. He  
30          mentioned that it gives a summary of how Brown Edwards arrived at their  
31          unmodified audit opinion. He stated that in the copy of this letter is a

**Albemarle County Service Authority Board of Directors**

1 management representation letter, which is signed by ACSA management.  
2 He stated that overall, it was a very clean audit thanks to Gary O’Connell,  
3 Quin Lunsford, and the ACSA finance team. He stated that the staff was  
4 very prepared, and everything ran smoothly. He added that it is always a  
5 pleasure working with the ACSA staff, and Brown Edwards is happy to be  
6 the organization’s auditors.

7 Mr. Lunsford came forward to give a Power Point presentation to the  
8 Board (Attached as Pages \_\_\_\_\_). He stated that he would begin with  
9 looking at the overall financial report and give the Board a refresher on  
10 what is included. He stated that he would then go over some of the  
11 highlights and operating information, with a summary to finish. He stated  
12 that he would like to thank all departments and everyone that has compiled  
13 information throughout the year. He mentioned that he wanted to  
14 specifically commend Deanna Davenport, Theresa Whiting, Jennifer  
15 Bryant, and Tonya Foster. He stated that their work throughout the year  
16 allows the ACSA to complete the audit engagement quickly. He noted that  
17 they do an incredible amount of work to ensure the financial reports the  
18 Board receives monthly are as accurate as possible, and that the final  
19 financial report is in good shape.

20 Mr. Lunsford stated that there are four sections to the Annual  
21 Comprehensive Financial Report (CAFR), which is included in the Board  
22 packet. He stated that the Introductory Section includes a Letter of  
23 Transmittal that he and Mr. O’Connell draft each year. He stated that it  
24 summarizes, at a high level, happenings at the ACSA and in the  
25 community as a whole. He stated that also included in this section is the  
26 ACSA’s award from the Government Finance Officers Association (GFOA)  
27 from the previous year’s financial report, the ACSA Board members for the  
28 current year, and an ACSA organizational chart.

29 Mr. Lunsford stated that the next section is the Financial Section,  
30 which includes management’s discussion and analysis which is more in-  
31 depth than the actual financial statements and footnotes presented later.

**Albemarle County Service Authority Board of Directors**

1 He stated that the third section, the Statistical Section, is towards the end  
2 of the packet and shows financial and operational comparisons between  
3 the current year and the prior nine years. He noted that finally, the  
4 Compliance Section, includes the Comment on Internal Controls. He noted  
5 that he is very pleased that there were no findings there.

6 Mr. Lunsford stated that he would now go over a few financial  
7 highlights. He stated that the ACSA did increase net position this year by  
8 over \$8 million, or 3.8%. He stated that in FY 2021, the net position  
9 increased nearly \$12 million, so there was a slight reduction in the increase  
10 but still an increase, nonetheless. He stated that in terms of operating  
11 income for the last five years, the ACSA remains in sound financial  
12 condition.

13 Mr. Lunsford stated that operating revenues increased almost \$3  
14 million, which is double than what was expected in the budget. He  
15 mentioned that there was also about an 8% increase in operating  
16 expenses, which was mostly driven by expected increases from RWSA for  
17 water and wastewater treatment. He mentioned that there was a decrease  
18 in capital contributions for the current year compared to the prior.

19 Mr. Lunsford stated that this next slide illustrates total assets by asset  
20 type, with the bulk of the assets on the balance sheet related to capital  
21 assets. He stated that investments are the next largest item in current  
22 assets. He noted that the large change in the blue and green bars from FY  
23 2020 to FY 2021 was related to the ACSA's transition from full investment  
24 in the Local Government Investment Pool (LGIP) to a more diverse  
25 portfolio with PFM Asset Management. He added that the next slide was  
26 another illustration of assets by type, with capital assets being the largest  
27 piece of the pie chart followed by cash investments.

28 Mr. Lunsford stated that in terms of total liabilities, there has been quite  
29 a reduction in long-term liabilities in FY 2022. He stated that there are two  
30 components related to that, one being the refunding of the 2010 Build  
31 America Bond in August 2022. He mentioned that the ACSA was able to

**Albemarle County Service Authority Board of Directors**

1 realize some net present value savings related to that refunding. He stated  
2 that the second component, more notably, is the change in the net pension  
3 liability, which is the liability projected by the Virginia Retirement System  
4 (VRS) for the ACSA's employee pensions. He noted that investment and  
5 returns were incredible, which greatly reduced that liability. He added that  
6 ACSA expects that liability to increase in FY 2023.

7 Mr. Lunsford moved to the next slide, which showed liabilities by type.  
8 He stated that debt is the largest portion of the pie, at about \$5 million,  
9 followed by accounts payable. He mentioned that most of the accounts  
10 payable portion is related to what the ACSA owed RWSA as of June 30,  
11 2022, which is about \$3 million. He noted that the unearned connections  
12 section on the chart refers to prepayments on connection charges, which  
13 are not recognized as revenue and are recorded as liabilities until service  
14 begins.

15 Mr. Lunsford stated that the next slide shows net position. He stated  
16 that the restricted portion is so small, it is not reflected on the bar graph but  
17 totals about \$300,000. He stated that it is related to an escrow account that  
18 the ACSA remits interest and principal payments for, and that money is  
19 restricted until it is paid. He stated that the unrestricted net position  
20 continues to grow, albeit at a slower rate than the net investment in capital  
21 assets.

22 Mr. Lunsford stated that in FY 2022, there were 357 new connections to  
23 the system. He stated that this number is a decrease from the 451 in FY  
24 2021, but still a reasonably strong year with all things considered. He  
25 mentioned that the staff read over nearly 266,000 water meters and  
26 processed over 8,300 service orders.

27 Mr. Lunsford stated that the next slide shows a chart taken from the  
28 back of the CAFR. He stated that it shows the billed consumption by fiscal  
29 year. He noted that there was an increase in FY 2022, with water up by  
30 over 4% and wastewater treatment by almost 5%. He stated that the

**Albemarle County Service Authority Board of Directors**

1 expectation, given what has been seen so far, is that these numbers will  
2 come back down this year.

3 Mr. Lunsford stated that the next slide was another graphical  
4 representation of connections by fiscal year. He stated that it shows  
5 continued growth in the system over the last decade.

6 Mr. Lunsford stated that in summary, with all of the impacts of COVID at  
7 the organization and in the community, the ACSA had a very good financial  
8 year. He stated that dry, hot weather during the early part of the fiscal year  
9 drove up consumption, almost historically. He noted that this assisted with  
10 the increase in net position. He mentioned that there was a slight decrease  
11 in capital contributions. He stated that operating expenses increased, but  
12 the increase was expected and included in the budget.

13 Mr. Lunsford stated that he would like to thank Mr. Tolbert and Mr.  
14 Parcels for the conversations they had last week. He stated that he felt the  
15 meeting was good and in-depth, and very helpful for the staff.

16 Mr. Moore stated that he wanted to thank Mr. Lunsford for the clear,  
17 top-line overview. He stated that it is good to see the ACSA in such a good  
18 financial position. He asked if there was any sense on how limiting future  
19 rate increases and spreading them out over time would affect net position  
20 in the future. Mr. Lunsford replied that it is difficult to say because  
21 connection charges are so variable. He mentioned that whether or not that  
22 revenue is recognized will drive a change in net position as much as  
23 anything. He noted that operationally, the ACSA is behind what he had  
24 hoped in terms of water sales and sewer treatment. He stated that, as the  
25 Board has seen in the monthly financials, the billed consumption on the  
26 water side shows significant reductions for month-to-month comparisons  
27 between FY 2022 and FY 2023.

28 Mr. Moore stated that it seems that as long as the community continues  
29 to grow and there are a lot of connection charges, it will be easy to remain  
30 in the black. Mr. Lunsford concurred. Mr. O'Connell stated that this is the  
31 key indicator. He stated that if the growth begins to slow down, the ACSA

**Albemarle County Service Authority Board of Directors**

1 may have to rethink things, but there are still lots of plans for new  
2 development.

3 Dr. Palmer stated that the growth has been amazingly consistent for  
4 nearly 30 years. She stated that she recalls when she was on the Board in  
5 2006, and 10-15 years before that, there was a steady increase from year  
6 to year.

7  
8 8. Operational Presentation – Exclusion Meter Replacement Program

9 Mr. O’Connell stated that this item relates to a major policy  
10 discussion that the Board had about removing exclusion meters. He stated  
11 that this Power Point (Attached as Pages \_\_\_\_\_) will go over a few  
12 things, including the status of the program and some of the difficulties that  
13 the staff is encountering in trying to replace the meters. He stated that Alex  
14 Morrison, Senior Civil Engineer, is the lead engineer on this project. He  
15 added that Mike Lynn, Director of Operations, oversees the maintenance  
16 crews that are in the field and performing the work.

17 Mr. Morrison stated that he has been involved with this project  
18 since August when it transferred to him from Jeremy Lynn. He stated that  
19 Mike Lynn would be presenting today with him as well. He mentioned that  
20 before they get started, he wanted to recognize Calvin Underwood,  
21 Operations Supervisor, and Robbie Lawson, who will take over Mr.  
22 Underwood’s position when he retires next month. He stated that they  
23 handle a lot of scheduling and supervision of the construction crews,  
24 inventory, work orders, and expense coding. He mentioned that he also  
25 wanted to recognize Charlie Thomas and Jason Thomas, who are both  
26 crew leaders working in the field to perform these conversions, as well as  
27 their respective crews. He noted that without these folks, this project would  
28 not be possible or as successful as it has been.

29 Mr. Morrison stated that he would first walk the Board through  
30 some information on exclusion meters, followed by auxiliary meters, and  
31 then some details on the program. He stated that after that, Mike Lynn

**Albemarle County Service Authority Board of Directors**

1 would walk the Board through some project pictures, as well as a list of  
2 challenges and issues that the staff has encountered with the project.

3 Mr. Morrison stated that an exclusion meter, also known as a  
4 deduct meter, is a privately owned and maintained meter that branches off  
5 of the private service line behind the customer's domestic meter. He stated  
6 that these meters were allowed in the system up until January 1, 2006  
7 when the Rules and Regulations changed, no longer allowing them to be  
8 installed in the system. He mentioned that the general idea behind this is  
9 the ACSA reads the domestic meter to see how much water passes  
10 through that meter into the private plumbing for that lot. He stated that the  
11 deduct meter records how much water then comes out of that system  
12 directly to the irrigation system, so the ACSA knows the volume of sewer  
13 charges to deduct from their monthly bill because the water that goes into  
14 the irrigation system does not come back into the ACSA's sewer collection  
15 system.

16 Mr. Tolbert asked who reads those exclusion meters to tell how  
17 much water is being used. Mr. Morrison stated that ACSA crews read the  
18 meters. He stated that the meters are privately owned and maintained but  
19 are required to be compatible with the ACSA's reading system. He  
20 mentioned that the current system is a touch-read system, but in the future,  
21 it will be an AMI system which will require upgrades to the meters. He  
22 noted that if the exclusion meter malfunctions, the property owner is  
23 responsible for replacing it at their expense. He added that if they do not  
24 replace it, they do not get the sewer deduction.

25 Mr. Morrison stated that the next slide shows a sketch of how the  
26 exclusion meters are set up. He stated that the ACSA water main is in the  
27 street and the service line is tapped off of that to the domestic meter. He  
28 stated that the ACSA owns and operates that domestic meter, and that is  
29 the end of the ACSA's ownership. He stated that from there, the private  
30 service line runs to the house or structure and at some point, branches off  
31 to the privately owned exclusion meter, where there is a backflow

**Albemarle County Service Authority Board of Directors**

1 prevention assembly before it then serves the irrigation system. He noted  
2 that the exclusion meters are generally located 3-5ft behind the domestic  
3 meter.

4 Mr. Morrison stated that on January 1, 2006, the ACSA switched to  
5 auxiliary meters. He stated that the main differences are that the auxiliary  
6 meter has a dedicated tap off of the ACSA system, it is an ACSA owned  
7 and operated meter, and it feeds only the irrigation system. Dr. Palmer  
8 asked if the service was coming straight from the main in the street. Mr.  
9 Morrison replied yes. He stated that the next slide shows a sketch of how  
10 the auxiliary meters are set up. He stated that it is a double tap where the  
11 ACSA service line comes off of the main and splits into two service lines to  
12 feed the domestic meter and the auxiliary meter. He noted that sometimes  
13 there is a single service line that comes off of the main directly to the  
14 auxiliary meter.

15 Mr. Moore asked how many of these meters remain the system. Mr.  
16 Morrison replied that there were 495 in the system at the start of the  
17 program and 352 at the time that this presentation was prepared. He noted  
18 that, to date, there are 347. He stated that even after the ACSA stopped  
19 allowing them in the system, there were 495 of them and they began to  
20 cause issues. He mentioned that because the meter is privately owned, the  
21 ACSA does not have the authority to turn off and lock them if there were to  
22 be an issue, such as water restrictions due to a drought. He mentioned that  
23 the only solution would be to turn off the domestic meter, which the ACSA  
24 would not want to do because it would turn off the water to the entire  
25 structure. He stated that irrigation systems are considered high hazard,  
26 thus they have a reduced pressure zone backflow prevention assembly. He  
27 noted that these assemblies are required to be tested annually, and if they  
28 fail to test the device, the ACSA would not be able to turn the meter off.

29 Mr. Morrison stated that this exclusion meter program was created  
30 to be at the expense of the ACSA, with maintenance staff converting the  
31 exclusion meters to auxiliary meters. He stated that the ACSA makes the

**Albemarle County Service Authority Board of Directors**

1 tap on the main and switches the meter over to the ACSA's system. He  
2 stated that if the meter needs to be replaced, the ACSA replaces it under  
3 the program and covers all associated expenses. He stated that the  
4 ACSA's current Rules and Regulations states that if a customer is unwilling  
5 to make the conversion, they will receive a 30-day notice to comply. He  
6 stated that after 30 days, the ACSA will no longer read the exclusion meter  
7 nor deduct sewer charges. He noted that there were a few customers that  
8 no longer wanted an irrigation system, in which case the ACSA abandoned  
9 the exclusion meter for them. He added that a majority of customers like to  
10 convert to the auxiliary meter because they like the benefit of the irrigation  
11 system on their property.

12 Mr. Morrison stated that the next slide is a map that shows the  
13 geographic location of the remaining exclusion meters in the system. He  
14 stated that they are pretty spread out, with 152 out of 347 located in the  
15 Glenmore subdivision. He stated that the following slide gives a higher  
16 resolution view of the Glenmore area. He mentioned that currently, ACSA  
17 staff is primarily working in the Glenmore area that they refer to as the  
18 Darby west area. He noted that Darby west refers to Darby Road west of  
19 Piper, which is the main thoroughfare in Glenmore, as well as all of the side  
20 streets. He mentioned that the ACSA is working with the HOA on this  
21 because they have a repaving project. He stated that they agreed to delay  
22 that project until early spring of 2023 to allow the ACSA time to make all of  
23 the conversions in that area. He stated that there are 55 meters left in that  
24 area. He added that once they are done, then S.L. Williamson can  
25 complete the paving and there will not be any patches in the road.

26 Mr. Morrison stated that he would now hand over the presentation  
27 to Mike Lynn, who would walk the Board through some of the project  
28 pictures. Mr. Lynn stated that the first picture shows the white paint and  
29 white flags used to identify the area Miss Utility needs to mark. He stated  
30 that the ACSA also tries to notify the customers as to why the white paint  
31 and flags are on their property. Dr. Palmer asked for clarification on how

**Albemarle County Service Authority Board of Directors**

1 the ACSA tries to notify the customer. Mr. Lynn stated that the staff will  
2 either knock on the door and speak with the customer or leave a door tag.  
3 Mr. Morrison stated that in addition to that, the ACSA mailed a letter to  
4 every resident in Glenmore to make them aware of the work that was  
5 occurring, even if they did not have an exclusion meter. He stated that the  
6 staff also utilized the email addresses associated with the account, which  
7 covered about 75% of the customers in that area.

8 Mr. Lynn stated that the next picture shows a picture of some  
9 shrubbery in the area. He stated that customers will sometimes use  
10 shrubbery to hide things like electrical boxes, cable boxes, and meters. He  
11 stated that this blocks access to the meter. He stated that the soil in this  
12 area is hard, and the maintenance crews have a lot of difficulty with utilities  
13 in this area. He mentioned that there is a lot of hand digging required which  
14 is very time consuming.

15 Mr. Lynn stated that the next few pictures show a finished product  
16 of two meters being looped into four separate meters and where the  
17 asphalt has been patched and repaved. He stated that the goal is to  
18 restore the landscaping to its original state as best as possible. He noted  
19 that the next slide shows one of the asphalt patches, which will be  
20 overlayed when the HOA completes its paving project in the spring.

21 Mr. Lynn moved to the next slide which illustrated a trench box. He  
22 stated that sometimes the services are a bit deeper than the crews would  
23 like them to be. He mentioned that the Occupational Safety and Health  
24 Administration (OSHA) requires the use of a trench box when going five  
25 feet or deeper. He noted that they may use a trench box at less than five  
26 feet if the soil is loose.

27 Mr. Lynn stated that the next slide is a picture of one of the ditches  
28 where the crews are starting to separate the meters. He stated that the  
29 ACSA crews run copper service lines to the meters, at which point the  
30 customer's contractor or plumber will use whatever material they want for  
31 the private lateral. He stated that the next slide is a close up of a

**Albemarle County Service Authority Board of Directors**

1 conversion from two meters to three meters, as one of the customers did  
2 not want an auxiliary meter.

3 Mr. Parcels asked if the backflow prevention assembly is part of  
4 the meter itself. Mr. Lynn replied no. He stated that they are located in a  
5 separate box above ground. He mentioned that the ACSA has no  
6 responsibility for installing or replacing the backflow prevention assembly,  
7 as it is privately owned by the customer. Mr. Morrison stated that the  
8 reduced pressure zone backflow prevention assembly that is required for  
9 irrigation must be installed above-ground because when it prevents  
10 backflow, it dumps water. He noted that having it underground would result  
11 in the device submerging itself.

12 Mr. Lynn stated that the next few pictures showed some more  
13 hand-digging and the various utilities the ACSA has to be aware of. He  
14 stated that the biggest concern are the small lines such as the telephone  
15 and cable lines. He stated that the crews use a 12-inch backhoe bucket,  
16 instead of 24 inches, which allows the digging to be more precise and the  
17 ditches narrower. He stated that the last picture shows the finished product  
18 before the restoration work begins. He noted that the goal is to keep the  
19 meters as close together as possible.

20 Mr. Lynn stated that in terms of challenges and issues with this  
21 project, COVID has been a huge one. He stated that landscaping has been  
22 difficult, as some of it is very detailed. He mentioned that a lot of the lawns  
23 were seeded, but some of them were sodded. He stated that the ACSA  
24 purchased a sod cutter, to try and salvage as much of the sod as possible.  
25 He stated that traffic has also been an issue, as the roads in Glenmore are  
26 not that wide. He mentioned that the crews have had to use road plates as  
27 they have had to cut them open, and it has been a challenge to navigate  
28 residents through the work area.

29 Mr. Lynn stated that weather has been an issue, as the crews  
30 cannot work for a day or two after it rains. He stated that personnel and  
31 hardware shortages due to COVID has presented challenges as well. He

**Albemarle County Service Authority Board of Directors**

1 mentioned that the chip issue that has affected the AMI project has also  
2 affected the exclusion meter replacement program. He stated that the  
3 underground rock in that area has been difficult to work with. He noted that  
4 the HOA allowing the ACSA to open cut the road helps with this issue. He  
5 added that adjusting the elevation between services and PVC material on  
6 the private side have required some additional work also.

7 Mr. Parcels asked what the timeline is to get the remaining 347  
8 exclusion meters converted. Mr. Morrison replied that the ACSA is probably  
9 a couple of years out from finishing all the meters. He mentioned that, as  
10 Mr. Lynn mentioned, COVID and staffing issues made it difficult to dedicate  
11 a crew solely to the project. He noted that there are a lot of variables that  
12 factor into the timeline, but he will take a look at it and come up with an  
13 estimate. He stated that the priority is to complete the remaining 55 meters  
14 in the Darby west area.

15 Dr. Palmer asked, prior to COVID, if the staff had a target number  
16 of meters to complete each year. Mr. Lynn replied that they had just been  
17 completing them as time permits. He stated that the crews are averaging  
18 about two customers per week.

19 Dr. Palmer stated that she understands why the crews are working  
20 in the area they are now but asked how the staff chose which meters to do  
21 when prior to now. Mr. Lynn replied that they focused on the “low-hanging  
22 fruit” outside of Glenmore, in areas like Dunlora and Crozet.

23 Mr. Parcels asked if this project ties into the issue of unmetered  
24 water. Mr. Morrison replied no. He stated that with the exclusion meter, the  
25 water passes through the domestic meter, so it is all metered. He stated  
26 that the privately owned exclusion meter is used to make the transition to  
27 irrigation water, or water only charges.

28 Mr. Tolbert asked if the meter work has been easier in other places  
29 aside from Glenmore. Mr. Lynn replied yes. He stated that all of the lots in  
30 Glenmore have the hard soil, whereas other areas in the county do not. He  
31 stated that the ACSA has dedicated easements around the meters and fire

**Albemarle County Service Authority Board of Directors**

1 hydrants, but it can still be an issue sometimes. Mr. Armstrong asked if the  
2 ACSA gave up any rights legally if the crews do not remove obstructions  
3 inside the easement. Mike Derdeyn replied that the easement documents  
4 clearly state that the ACSA has the right to remove any obstructions with  
5 no obligation to replace it. He stated that the restoration work the ACSA  
6 crews perform is purely good customer relations.

7  
8 9. Water Audit Report

9 Mr. O'Connell stated that Jeremy Lynn, Director of Engineering,  
10 would give a quick presentation (Attached as Pages \_\_\_\_\_) on this item.  
11 He stated that this was a Strategic Plan item to look at water use in the  
12 system and identify any issues.

13 Mr. Lynn stated that he first had a comment for Mr. Parcels. He  
14 stated that the Exclusion Meter Replacement Project will extend the life of  
15 some of the domestic meters because the irrigation water is not being  
16 pushed through the domestic meter. He stated that related to water  
17 auditing, older mechanical meters will slow down as they age, and  
18 customers are not incentivized to replace those private meters when they  
19 are not reading the way they should. He noted that this gets to some of the  
20 water loss that he will speak about. He stated that the water is going  
21 through the meter so it is not technically lost, but the ACSA is not keeping  
22 track of it as well as it could be.

23 Mr. Lynn stated that he would be speaking about the ACSA's water  
24 auditing efforts for the Crozet and Scottsville distribution systems. He  
25 stated that he would talk about what water loss is, why the water is tracked,  
26 where the ACSA is in its ongoing efforts, and what the organization is  
27 looking to do in the future.

28 Mr. Lynn stated that water loss is the difference between the  
29 volume of water that is supplied by RWSA and the volume of water that the  
30 ACSA has authorized consumption for. He stated that the AWWA M36  
31 Water Balance chart breaks down the various components that make up

**Albemarle County Service Authority Board of Directors**

1 the water balance. He stated that the chart begins with water supplied and  
2 then each drop of water goes into various subcategories. He noted that he  
3 would be focusing on the water loss category, which is comprised of  
4 apparent loss and real loss.

5 Mr. Lynn stated that real loss is water that is put into the system but  
6 never reaches a customer. He stated that examples would be water that  
7 leaks out from the distribution system, storage tank overflows, or a service  
8 line leak before it reaches the domestic meter. He stated that apparent loss  
9 is when water reaches a user, but the ACSA is not properly metering it or  
10 receiving revenue from it. He stated that examples of this would be water  
11 theft, customer metering inaccuracies, and data handling errors.

12 Mr. Lynn stated that the ACSA tracks water loss because it reduces  
13 operating costs. He mentioned that it is important to maximize the revenue  
14 from water that is being sold by RWSA. He stated that tracking water loss  
15 also aligns with the ACSA's overall vision statement which is "Serve and  
16 conserve today, sustain for tomorrow, and protect our resources forever."

17 Mr. Lynn stated that the ACSA has been able to perform two  
18 annual water audits for both the Crozet and Scottsville system. He stated  
19 that Crozet is being audited on a calendar year basis, as the timing of the  
20 new finished water meter at RWSA's filter plant allowed the water auditing  
21 efforts to begin sooner than Scottsville. He stated that in the first year,  
22 Crozet was at 11% water loss and 14.6% in the second year. He  
23 mentioned that a fiscal year water audit for Crozet is scheduled to take  
24 place in the next month or two.

25 Mr. Lynn stated that there have been some improvements in the  
26 percentage of water loss in Scottsville, going from 16.26% to 9.95%. He  
27 stated that the Environmental Protection Agency (EPA) website indicates  
28 14% as an average level of loss. Mr. Parcels asked if there were any  
29 guesses for the Urban system as to whether it would be lower or higher  
30 than that 14%. Mr. Lynn replied that it is more difficult to perform a water

**Albemarle County Service Authority Board of Directors**

1 audit on the Urban system because of its interconnection with the City of  
2 Charlottesville.

3 Mr. Armstrong asked what the data validity score on the water audit  
4 chart meant. Mr. Lynn replied that it is a score generated by the water loss  
5 audit software. He stated it is a 0-100 score, broken down into five tiers. He  
6 stated that depending on the score, it places the water system in a tier with  
7 a set of suggestions on ways to improve. He mentioned that the ACSA is  
8 seeing improvements, a lot of which are related to AMI and improved  
9 metering accuracy and calibration efforts by RWSA.

10 Mr. Armstrong stated that the data validity score for Crozet  
11 improved, but the total water loss increased. Mr. Lynn replied that the two  
12 are not necessarily related. He stated that the increase in the validity score  
13 just means that there was better data from a policy standpoint but does not  
14 reflect the actual water loss.

15 Dr. Palmer stated that Scottsville used to be a lot worse in terms of  
16 water loss. Mr. Lynn stated that he would discuss some challenges in the  
17 Scottsville area. He stated that based on the data validity score, the ACSA  
18 receives guidance on areas that it needs to focus on. He stated that the  
19 first area is customer metering inaccuracies. He mentioned that the ACSA  
20 has not had a chance to increase its meter testing program, but once it  
21 does there will be some benefits.

22 Mr. Lynn stated that another priority area is water imported. He  
23 stated that RWSA is the only water provider in the area and if the meter at  
24 the filter plant is not reading accurately, it will affect the entire water  
25 balance equation. He stated that the third area of priority is unbilled  
26 metered authorized consumption. He stated that using water through the  
27 auto-flushers is metered so the ACSA is keeping track of it, but it is water  
28 that does not generate any revenue. He mentioned that it will be important  
29 to optimize the use of these auto-flushers to reduce non-revenue water. He  
30 added that fire hydrant testing and other proactive efforts to maintain water  
31 quality would also fall under this category.

**Albemarle County Service Authority Board of Directors**

1           Mr. O'Connell asked Mr. Lynn if he thinks there will be some  
2 system changes in Scottsville. Mr. Lynn replied that he thinks there will be.  
3 He stated that there are two water tanks in Scottsville, one owned by  
4 RWSA and one that belongs to the ACSA. He mentioned that this is a lot of  
5 storage for a system that does not have a lot of customers. He noted that  
6 economic development is beginning to be discussed with a Bird Street  
7 development and repurposing of the tire plant. He stated that this will mean  
8 more customers and less of a need for flushing in the system.

9           Mr. Lynn stated that in terms of future efforts, the ACSA staff will  
10 continue working on water audits for Crozet and Scottsville and attempt to  
11 identify patterns and ways to improve water auditing for these two systems.  
12 He mentioned that the ACSA has yet to perform a water audit for the Red  
13 Hill system, which is very small. He noted that it is a well system, thus it  
14 would be good to know that water is not being pumped out of the ground  
15 and going to waste. He stated that with the Urban system, the ACSA will be  
16 embarking on a collaborative effort with RWSA and the City of  
17 Charlottesville. He stated that now that the wholesale meters are in place, it  
18 will be interesting to see how they play a role in the Urban system water  
19 auditing process. He stated that the ACSA will also be establishing long-  
20 term apparent and real loss reduction goals once more data is gathered.  
21 He added that both Crozet and Scottsville have water main replacement  
22 projects in the works, which should help with the water loss as well.

23           Mr. Roberts asked how the wholesale metering numbers for the  
24 County compare to the water that is being purchased from RWSA. Mr.  
25 Lynn replied that he would have to dive deeper into the actual numbers, but  
26 they will be off some. Mr. Roberts stated that since he has been on the  
27 Board, including when Dr. Palmer was first on the Board, water loss has  
28 been an issue. He stated that basically in Crozet, according to the water  
29 loss chart, there was 36 million gallons of water in 2021 that the ACSA  
30 purchased from RWSA and did not sell back to its customers. Mr. Lynn  
31 stated that, in layman's terms, this is correct.

**Albemarle County Service Authority Board of Directors**

1           Mr. O'Connell stated that these water audits are like doing  
2 detective's work in that they point to areas where there is a problem, after  
3 which steps are taken further and further to identify and reduce the water  
4 loss. He stated that there becomes a point when it is not cost effective to  
5 continue, but these first few audits clearly show there is more work to do.  
6 He added that they act as a planning tool to guide the ACSA's efforts. Mr.  
7 Lynn added that these water audits can guide the maintenance  
8 department's leak detection program. He mentioned that if there is a  
9 certain area or system that is exhibiting excessive leakage, the staff can  
10 begin to focus on that area and try to identify where the loss is coming  
11 from.

12           Mr. Tolbert asked if anyone pays the ACSA for water used for fire  
13 protection, and if the ACSA paid for installing fire hydrants. Mr. Lynn replied  
14 that the developer installs fire hydrants for new construction, and the ACSA  
15 operates and maintains them. He stated that this is another source of  
16 unknown quantities of water being used. He mentioned that the ACSA  
17 does not know how much water the fire department uses, whether for  
18 training or actual fire fighting purposes.

19           Mr. Tolbert asked if anyone is reimbursing the ACSA for supplying  
20 hydrants and water. Mr. Lynn replied that fire sprinklers can be added to  
21 that list, as the ACSA does not charge for water that enters into a fire  
22 sprinkler system. Mr. Parcels asked if that water is potable. Mr. Lynn  
23 replied yes. Mr. Tolbert stated that the fire protection is a service that water  
24 customers are essentially paying for. Mr. Lynn replied yes. Mr. Tolbert  
25 stated that people in the county that are not water customers are receiving  
26 the fire protection as well but are not paying for it. Mr. Lynn replied that  
27 some of them are not receiving the fire protection. He stated that  
28 customers in the rural areas do not have fire protection and are actually  
29 paying an additional cost on their insurance.

30           Dr. Palmer stated that the fire department is funded through  
31 property taxes, so customers are paying for that as well. Mr. O'Connell

**Albemarle County Service Authority Board of Directors**

1 stated that it is part of the public service, and the system is oversized to be  
2 able to provide that protection. He stated that the ACSA has been  
3 aggressive about maintaining hydrants in the system more than most  
4 utilities, to ensure that they are always working in the event of an actual  
5 fire. Mr. Lynn added that the ACSA is notified of every fire and  
6 subsequently, the maintenance staff performs an inspection to make sure  
7 the hydrant is ready to go for the next use.

8 Mr. Armstrong asked if there have been any significant instances of  
9 water theft. Mr. Lynn replied that there have not been any major  
10 occurrences, but there have been a few cases where a builder or  
11 contractor needed water in a community and straight piped through a meter  
12 setter. He stated that the staff has also seen water haulers pull from  
13 hydrants without a meter. He mentioned that volume wise, these cases do  
14 not involve a huge amount of water. He noted that the bigger concern is  
15 protecting the system from a backflow standpoint, and whether they are  
16 compromising the system.

17 Mr. Armstrong asked if those individuals are referred criminally. Mr.  
18 Lunsford replied that they will be charged a fine if they are a repeat  
19 offender. He mentioned that Tim Brown's environmental group is currently  
20 in the process of tracking down a contractor for water theft. He stated that  
21 there was an extreme example of water theft in the past month, which the  
22 new AMI system will help to prevent in the future. He stated that the  
23 customer was disconnected for nonpayment and the meter was locked. He  
24 stated that the lock was cut, after which the staff completely removed the  
25 meter. He stated that the customer then borrowed their neighbor's meter  
26 and put it in their setter. He noted that with AMI, the staff will receive an  
27 alert when there is any tampering with the meter.

28  
29 10. Items Not on the Agenda

30 Mr. O'Connell stated that he had a couple of items, the first being  
31 the budget for next year. He stated that the staff has begun having internal

**Albemarle County Service Authority Board of Directors**

1 discussions, and there is a budget schedule and general guidelines  
2 included in next month's Board agenda. He stated that RWSA is also  
3 beginning its CIP projects development, which will be reviewed in early  
4 December. He noted that this tends to be a major driver of the ACSA's  
5 rates.

6 Mr. O'Connell stated that the next item he wanted to mention is the  
7 Albemarle County Board of Supervisors went through a Strategic Plan  
8 process including a series of workshops. He mentioned that they adopted a  
9 Strategic Plan that has an item in it to align water and wastewater  
10 infrastructure with the County's development goals. He stated that the  
11 ACSA's water and wastewater systems over time, and in a great level of  
12 detail, are sized to meet development needs in the growth area as  
13 designated in the Comprehensive Plan and the Zoning Plan for full build-  
14 out densities. He noted that if those plans change, the ACSA's long-term  
15 plans could change. He stated that Dr. Palmer could probably speak to  
16 this better than him, but it seems that every time there is a discussion  
17 about the Comprehensive plan, issues come up about expanding the  
18 growth areas in the County.

19 Mr. O'Connell stated that the second piece of this, which comes up  
20 project by project, is that some of the County's economic development  
21 interest has recently been around attracting some major businesses that  
22 could be large water users. He stated that there has been a lot of  
23 discussion about the North Fork Research Park going through some level  
24 of expansion and zoning changes with the County to utilize some of the  
25 land they have. He mentioned that ACSA staff believes the system can  
26 handle the water and wastewater needs for the research park, but it could  
27 put some pressure on the system in the future.

28 Mr. Roberts asked if Mr. O'Connell was included in the discussions  
29 before the Strategic Plan was finalized. Mr. O'Connell replied that he has  
30 had discussion with the economic development staff on several occasions  
31 about particular projects. He stated that there is some concern about how

**Albemarle County Service Authority Board of Directors**

1 much capacity is in the system for a major water user at North Fork  
2 Research Park. He mentioned that a lot of national development will go to  
3 the state economic development department, which then gets referred out  
4 to different localities. He stated that he thinks the County's economic  
5 development department is trying to prepare to handle larger  
6 developments, which deals with infrastructure issues beyond utilities.

7 Mr. O'Connell stated that the discussion surrounding the  
8 Comprehensive Plan was new to the ACSA. He stated that the specific  
9 item in the Strategic Plan, which he thinks was more driven by the staff  
10 than the Board of Supervisors, was new as well. He mentioned that the  
11 ACSA staff will be spending some time with the County executive staff,  
12 educating them on how the ACSA's connection fees work, the rate study  
13 process, and the growth pays for growth philosophy.

14 Dr. Palmer stated that the idea for the last 20 years has been to try  
15 and make the development area more attractive. She stated that this  
16 emphasis has been very strong in comparison to protecting the rural areas.  
17 She stated that the thought at that time was that expanding the growth area  
18 would frustrate the growth management goals to provide infill. She asked, if  
19 the Board of Supervisors were to invest a substantial amount of money to  
20 make certain areas of the growth area more attractive and provide  
21 infrastructure that would support increased density, are there areas other  
22 than North Fork that could have issues.

23 Mr. O'Connell stated that to some extent, it depends on the  
24 location. He stated that there are some commercial developments along  
25 Route 250 East that are using wells and septic, and there is a large water  
26 line that goes by those properties out to Glenmore. He mentioned that this  
27 could be an example of a change in what is allowed. Dr. Palmer stated that  
28 she is more so talking about locations that are currently part of the  
29 jurisdictional area. Mr. O'Connell stated that the ACSA's goal is to be  
30 positioned to handle the level of development that is in the County's

**Albemarle County Service Authority Board of Directors**

1 Comprehensive Plan and have the backbone infrastructure that can serve  
2 that development.

3 Dr. Palmer stated that she is curious as to if there are areas  
4 currently in the development area that do not require an expansion of the  
5 jurisdictional area for water and sewer. Mr. O’Connell replied that North  
6 Fork would be the one that is of most concern, but the ACSA should be  
7 able to handle what is currently planned for the long-term future. He  
8 mentioned, however, that if there is an increase in density or desire to bring  
9 in a major water user, this could change.

10 Mr. Moore stated that it seems a lot of developments get scaled  
11 down to be less dense as a result of neighborhood opposition. Mr.  
12 O’Connell replied that traditionally, this has been the case, but there are  
13 some significant developments currently that are close to what the build-out  
14 density was in the Comprehensive Plan. Dr. Palmer added that if the  
15 infrastructure to support that density is in place in a reasonable time frame,  
16 most people will not be as upset about it.

17 Mr. Lynn stated that RWSA has done a great job of working every  
18 five years to identify, through the Comprehensive Plan, projections, and  
19 planning for those improvements in a realistic time frame. He stated that  
20 the challenge for both utilities are the one-offs that are not part of either’s  
21 plan, which creates a ripple effect that impacts other anticipated  
22 development. He noted that North Fork is a prime example.

23  
24 11. Executive Session – Mid-Year Executive Director Performance  
25 Review

26 Ms. Trent read a Resolution to enter Executive Session  
27 pursuant to Virginia Code §2.2-3711 A (1) to discuss a personnel matter  
28 (Attached as Page\_\_\_\_\_).

29 ***Dr. Palmer moved to approve the Resolution as presented***  
30 ***to the Board; seconded by Mr. Tolbert. The Chair asked for a roll-call***

**Albemarle County Service Authority Board of Directors**

1 ***vote: Mr. Parcells, aye; Dr. Palmer, aye; Mr. Tolbert, aye; Mr. Roberts,***  
2 ***aye; Mr. Armstrong, aye; Mr. Moore, aye.***

3 The Board of Directors came back into regular session. Mr. O'Connell read  
4 into record a Resolution stating that only matters so previously stated  
5 and exempted from open discussion in regular session were discussed in  
6 Executive Session (Attached as Page \_\_\_\_\_).

7 ***Mr. Parcells moved to approve the Resolution as presented***  
8 ***to the Board, seconded by Dr. Palmer. The Chair asked for a roll-***  
9 ***call vote: Mr. Parcells, aye; Dr. Palmer, aye; Mr. Tolbert, aye; Mr.***  
10 ***Roberts, aye; Mr. Armstrong, aye; Mr. Moore, aye.***

11  
12 12. Adjourn

13 ***There being no further business, Dr. Palmer moved that the***  
14 ***meeting be adjourned, seconded by Mr. Parcells. All members voted***  
15 ***aye.***

16  
17  
18  
19 \_\_\_\_\_  
20 Gary B. O'Connell, Secretary-Treasurer  
21  
22  
23  
24  
25