

Serving Conserving

Memorandum

To:	Albemarle County Board of Supervisors	
From:	Gary O'Connell, Executive Director	
Date:	April 21, 2021	
Re:	Albemarle County Service Authority (ACSA) Quarterly Briefing	
cc:	Mr. Jeff Richardson, County Executive; ACSA Board of	
	Directors; ACSA Leadership Team and Operations Council	

We do thank you for the continuing opportunity to share with the Board of Supervisors and the broader community what is happening at your water agency, the Albemarle County Service Authority. We pride ourselves on safe, clean, reliable Albemarle water. In this time of uncertainty with the Covid-19 Coronavirus continuing to impact our community, we at the ACSA have been focused on keeping the water flowing, keeping operations going, and staying safe. Here are some recent updates from the ACSA:

- Spring Customer Newsletter A copy of our spring newsletter is attached for your information, that announces our MyWater project and a water rate preview.
- 2. Proposed Budget and Rates The proposed FY 2022 Budget and Rates went to the ACSA Board at their April 15th meeting. We are proposing a 5% increase in monthly user rates effective July 1st. Our wholesale treatment provider RWSA is charging us a 15.5% increase, and we are using planned reserves to lessen the rate impact on our customers. The RWSA has four major treatment plant upgrades/renovations that are necessary funding to assure high quality water that can be reliably provided. This will be the first of several years of larger rate increases to support these projects. The ACSA average monthly bill continues to be below the statewide average, even with this proposed increase. See the attached "FY 2022 Budget and Rates" flyer that will be mailed to all our customers in May with their bills.
- <u>AMI (Advanced Metering Infrastructure)</u> One of our Strategic Plan major initiatives is to utilize the various AMI technologies that are available in the water metering world. A tremendous advantage with AMI is <u>near real time</u> <u>leak detection</u> inside the customer's home or business, or water service

line, a tremendous water conservation and cost savings tool. In our January 2019 Customer Survey, over 97% of the respondents found it important to have leak notification. We also will be adding a new customer "portal" online feature for a customer to track their water use. The initial phase is complete to test the communications and software. The next phase will start on April 12th to install 500 new meters and communications devices. The final phase (remaining 19,500 customers) will begin in late 2021, and all installations will take over a year to complete. Notices go out to each customer 30 days prior to installation, and then a mailer card 5 days prior to the meter install. The meter/communications device is a quick 15 to 20-minute change-out for each customer. We will be offering an "Opt-Out" for customers who do not wish to participate.

- 4. <u>Online Bill Payment</u> We will introduce a modern on-line electronic bill payment platform in May to take advantage of the latest technology. More of our customers have begun using on-line bill payment, and we want to improve our offering. This is one area from our customer surveys where customers have requested that we make improvements. We also will be eliminating our credit card fee, in an effort to encourage electronic bill payment which is more convenient for our customers.
- 5. <u>ACSA Capital Projects Update</u> The proposed FY 2022 Capital Improvements Program totals \$11.1 million. Current projects being proposed for design or funding for future construction include: Briarwood Water Main Replacement; Scottsville Phase 4 Water Main Replacement (James River Road); Airport Trunk Sewer Upgrade; Bellair-Liberty Hills Sewer System Construction; Barracks West Water Main Replacement (New); Broadway Street Water Main Replacement; Raintree and Fieldbrook PVC Water Main Replacement (New) and Biscuit Run Sewer Replacement (New).

The adopted FY 2021 Capital Improvements Program (CIP) started July 1st and is a \$6.9 million program. Highlights and current major projects are detailed below:

- <u>Camelot Water Main Replacement</u> Replacement of nearly 50-yearold water mains that are also undersized and deteriorating and becoming unreliable. Work is well underway with about 80% complete.
- <u>Madison Park Pump Station Upgrade</u> Constructed 37 years ago, by a private development, and the original equipment is wearing down, building is undersized, and we are not able to install SCADA (computerized monitor). The plan is to replace this pump station on-site. Design work is at the 90% stage. Easement acquisition is underway.
- <u>Oak Forest Sewer Pump Station Abandonment</u> This is an aging pump station in need of rehabilitation. With the adjacent Stonefield development, we now have the opportunity to extend a sewer main via

micro-tunnel and eliminate this aging pump station and avoid an expensive upgrade. Work on the construction has begun. A major underground tunnel bore is underway for the sewer piping for this project.

- Jefferson Village Water Main Replacement Replacing older (49 years) water mains made of inferior pipe product. Since originally part of a former well system, many of the mains are undersized. Design is at 100% completed. We have completed easement acquisition. The project is planned to be bid in the summer.
- Pantops Sewer Study Area study to reduce wet weather infiltration and inflow (I/I). This study will likely lead to targeted sanitary sewer system rehabilitation. Flow monitoring and manhole inspections have been completed, and the investigation portion of this project, including robotic televising of the sewer lines, has been completed. Rehabilitation work is underway.
- <u>SCADA (computerized monitoring)</u> A three phased project is nearing completion for over 40 water and wastewater facilities in the ACSA system. This is another of our projects to provide emergency alerting and monitoring to assure reliable water and wastewater service. We have completed the second phase of work, with the third phase design now complete.
- <u>Crozet Phase IV Water Main Replacement</u> Our Strategic Plan calls for the eventual replacement of all asbestos-cement 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 water mains in the Crozet Water System. This is the fourth of five phases that have been defined to carry out these improvements and is currently in design phase at the 90% stage.
- <u>Hessian Hills Water Main Replacement</u> The water mains in the Hessian Hills area have major deterioration, and they are also undersized throughout most of the subdivision. This project follows our Strategic Plan goal to replace aging and undersized water mains throughout our system. It will also eliminate a small amount of plastic pipe installed in the early 1980's. Work along Barracks Road and Georgetown Road will take place at night due to high traffic volumes during the day. Construction on this project begins in late April.
- <u>Hollymead Sewer Study</u> ACSA staff has identified other large drainage basins to be evaluated for infiltration and inflow (I/I) to continue our efforts to maintain the integrity of our wastewater collection system. This study area includes the oldest portions of the Hollymead Subdivision, as well as, the offsite portion of the sewer main that serves the westernmost area of Forest Lakes South. The Forest Lakes Offsite Sewer will be the primary collector for the upcoming Brookhill development, and an evaluation of this trunk main will provide an excellent baseline of pipe integrity in advance of the future

construction activities around this sewer. All of the manholes have been inspected, flow monitoring and smoke testing have been completed. About 99% of the study work has been completed.

- <u>Vulnerability Assessment</u> As part of an on-going emergency preparedness program, the ACSA is in a multi-phase effort to reduce risk and increase resilience. Projects include additional security measures, fencing and access gate enhancements, cybersecurity measures, additional tank protection, etc. The security fence has been installed at the Avon Park Tank site and the new security fence around our Maintenance Yard is under construction.
- <u>Sewer Force Main Condition Assessment</u> This project utilizes a computerized "SmartBall" that is flowed through the force main capturing assessment data (via acoustic monitoring technology) to determine any problem areas that require correction or further detailed investigation. Final report submitted showing some gas pockets in three force mains. Recommended pipe wall thickness measurements in these areas have been completed and a portion of the Woodbrook Pump Station force main has been identified for replacement.
- <u>Energy Audit</u> This project will consist of a comprehensive energy audit of the Operations Center and all pump stations (20). 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 are being conducted of all systems, including operation and maintenance procedures to determine where energy conservation can be improved.
- <u>Avon Street Maintenance Yard</u> 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 Pantops Operations Center is becoming overcrowded with equipment and materials, causing us to relocate some equipment and larger materials to the former ACSA Maintenance Yard at the Crozet Water Treatment Plant, which we lease from RWSA. This project will begin to develop the ACSA owned Avon Street property into a satellite facility for larger vehicle and materials storage. Design of the site is underway at the 40% stage and, as well as coordination with the Albemarle County Planning staff. A community meeting on the project was held on April 15th.
- Ragged Mountain Phase 1 Water Main Replacement 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. Design work is 90% complete. We are coordinating with VDOT where their road improvement project overlaps with ours.
- Northfields Water Main Replacement 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. Field surveying is complete, with design underway at the 50% stage.

- Exclusion Meters Replacement In the mid 1990's with the development of Glenmore, many new customers installed irrigation systems for their properties and wanted to have their sewer bills reduced by the amount of water that was diverted 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 private exclusion meters in our system. The number of exclusion meters in the ACSA system has been reduced to 429, with about 67 replaced thus far.
- Pipe Saddles Replacement The ACSA Maintenance Department has discovered in recent years that pipe saddles used to make water service line connections to PVC water mains have been failing. Either the zinc-coated straps or the cast iron saddle bodies are deteriorating. This project is a multi-year replacement program to be undertaken with our in-house capital project crew.

Let us know if you have further questions or comments. We are more than glad to meet with you or hold a virtual meeting to talk about any of our projects, or facilities, or provide a tour if that would be useful.

Attachments:

- ACSA Spring Customer Newsletter
- FY 2022 Budget and Rates flyer to customers



serviceauthority.org

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



Properly Planning for a Stronger Future

Dear Customer,

As we emerge from COVID-19, the ACSA and our wholesale water and wastewater treatment provider, the Rivanna Water and Sewer Authority (RWSA), are returning our focus to the long-term work needed to keep our aging systems - the RWSA's water treatment plants are more than 60 years old - safe and reliable. After all, one thing we can all take away from 2020 is how the ACSA and the RWSA both continued to provide clean water and helped protect public health by treating COVID-tainted wastewater.

The RWSA must perform significant upgrades at its plants over the next few years and we at the ACSA must play - and pay - our part. The RWSA plans to raise their FY '22 water rates by 18.2% and their sewer charges by more than 12%.

This spring, you will hear more about our proposed budget and rates for FY '22. We'll show you how the ACSA will fund essential infrastructure projects in a financially responsible manner that takes into account COVID's continued impacts.

Last year, we planned to start a necessary series of rate increases. Then COVID hit, and it wouldn't have been right to carry them out. Working with the RWSA, we were able to defer the increase. This year, however, we must raise rates. Fortunately, because of our past work to build funding reserves for use during challenging times, we're able to absorb much of the RWSA's proposed increases and propose a 5% increase in customer rates.

Next month, you will receive an insert on our budget and rates proposal for FY '22. I encourage you to review it and ask me any questions. As always, I thank you for your consideration.

Gary O'Connell, Executive Director



Our MyWater utility innovation program continues to move forward on our charted course for the future. April will mark the first phase of our advanced meter installations, which will take a year to complete.

Customers will receive prior notice before the work takes place and will be informed by a door hanger when the upgrade occurs. You do not need to be present.

We invite you to visit the MyWater section of serviceauthority.org. You will find details about the full program, as well as information on the meter upgrades.



ACSAConnect ACSA_connect

It's Time to Fix A Leak & Save Money

Household leaks can waste nearly 1 trillion gallons of water annually nationwide, so each year the EPA holds "Fix a Leak Week" to help you find and fix leaks inside and outside your home so you can save valuable water and money all year long.

The average household's leaks can account for nearly 10,000 gallons of water wasted every year and ten percent of homes have leaks that waste 90 gallons or more per day.

Common types of leaks found in the home are worn toilet flappers, dripping faucets, and other leaking valves. These types of leaks are often easy to fix, requiring only a few tools and hardware that can pay for themselves in savings.

To check for leaks in your home, you first need to determine whether you're wasting water and then identify the source of the leak. Here are some tips for finding leaks:



Old or worn-out toilet flappers can cause leaks. Replacing them can be a quick and easy fix for your water woes.



Old and worn faucet washers and gaskets frequently cause leaks in faucets. A leaky faucet that drips once per second can waste more than 3,000 gallons per year.



is a tight connection between the showerhead and the pipe stem and by using pipe tape to secure it.

Leaky showerheads can be

fixed by making sure there



If you have an in-ground irrigation system, check it each spring before use to make sure it wasn't damaged by frost or freezing.

2020 Annual Report Now Available Online

The ACSA has produced an Annual Report to detail our work on behalf of our customers during Calendar Year 2020. It goes without saying it was a difficult year for all of us. However, thanks to the work of our dedicated staff, we have taken the funds you've entrusted to us and made noteworthy progress on several major goals, despite COVID's challenges. You can find the report through our homepage at www.serviceauthority.org.





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

FY'22 Budget & Rates July 1, 2021 - June 30, 2022

Responsibly Financing a Sustainable Future

Dear Customer,

Before COVID-19 impacted all of us, the ACSA was preparing to institute a series of responsible rate increases to support our wholesale provider of water and wastewater services, the Rivanna Water and Sewer Authority (RWSA), with their need to continue to invest in their systems. Upgrades to their treatment plants alone are slated to cost more than \$165 million over the next five years.

Raising rates last year simply would've been the wrong thing to do. Working collaboratively with the RWSA, we adjusted our FY'21 budget in a matter of days and moved forward without a rate increase, using reserves the ACSA has built up for this kind of unanticipated emergency.

As we enter a new fiscal year, it's clear that the RWSA's work must be supported beyond what our reserves can do. They must pass down to the ACSA a 15.5% cost increase to fund their essential water and wastewater system upgrades.

The ACSA is responsible for nearly 57% of the RWSA's annual debt service, and charges from the RWSA make up more than 62% of our annual operating budget. As a result, we must propose raising our rates in Fiscal Year 2022 and in the future.

The mission of the ACSA is to provide safe, reliable water for an excellent value. As I hope you saw throughout 2020, delivering safe water to your tap was never more important than during the pandemic.

We at the ACSA remain mindful of COVID's impacts on you and your families. That's why we are applying more funding reserves to keep this year's proposed rates lower, reducing the RWSA's 15.5% move into a 5% one for our customers, with more increases spread out over several years.

The staff of the ACSA and I thank you for your patience and understanding as we continue to recover from COVID's effects over the course of 2021.

Gary O'Connell Executive Director, Albemarle County Service Authority

FY' 22 RWSA Cost Increase charged TO the ACSA 15.5%

FY' 22 Proposed Rate Increase charged BY the ACSA

ACSA Annual Obligations



% of ACSA's Operating Budget allocated to RWSA's charges



paid for by the ACSA

FY'22 Budget Facts & Figures

July 1, 2021 - June 30, 2022

ACSA Infrastructure Obligations

The ACSA is obligated to provide our wholesale service provider, the Rivanna Water and Sewer Authority, with funding for essential plant upgrades.

Below are the costs for the RWSA's upgrades, which must be paid for by rate increases charged by the ACSA and other regional partners and with the proper use of the ACSA's funding reserves.



South & North Fork Rivanna Water System

\$23.25 Million



Crozet Water System

\$27.8 Million





Observation Water Treatment Plant & Ragged Mountain/ Sugar Hollow Reservoir System

\$24.9 Million

Moores Creek Advanced Water Resource Recovery Facility (Wastewater)



Proposed ACSA Fy '22 Water & Sewer Monthly User Rates

Rates and Charges	FY '21	FY'22
Service Charge	\$8.57	\$9.00
Volume Charge: Single-Family Residential (per 1,000 gallons)		
Level 1: Up to 3,000 gallons	\$4.48	\$4.70
Level 2: 3,001 to 6,000 gallons	\$8.98	\$9.43
Level 3: 6,001 to 9,000 gallons	\$13.46	\$14.13
Level 4: More than 9,000 gallons	\$17.96	\$18.86
Multi-Family/Non-Residential (per 1,000 gallons)	\$8.66	\$9.09
Sewer: All Users (per 1,000 gallons)	\$9.47	\$9.94

Combined Monthly Bill Comparison

Single-Family Residential, 4,000 Gallons



ACSA Proposed Budget & Rates Public Hearing (Virtual Details TBD) Thursday, June 17 @ 9 am www.serviceauthority.org