

# MEMORANDUM

**To:** Albemarle County Board of Supervisors  
**From:** Gary O'Connell, Executive Director  
**Date:** October 2, 2019  
**Re:** Albemarle County Service Authority (ACSA) Quarterly Briefing  
**cc:** Mr. Jeff Richardson, County Executive; ACSA Board of Directors;  
ACSA Leadership Team and Managers

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Thank you for the on-going opportunity to share with the Board what is happening at your water agency, the Albemarle County Service Authority. We pride ourselves on safe, clean, reliable Albemarle water. Our employees continually work hard for this to happen and keep that trust in our drinking water, and provide excellent customer service. Here are some updates from the ACSA:

1. **Customer Newsletter** – Attached is a copy of our summer “News and Updates” with a focus on our Strategic Plan and feedback from our Customer Survey.
2. **AMI (Advanced Metering Infrastructure)** – One of our strategic plan items is to explore the various AMI technologies that are available in the water metering world. Most medium and large sized water utilities have already converted to the AMI technology. The feasibility study is completed which evaluated our technology options and looked closely at the needs of our customers. The ACSA Board reviewed the feasibility study recommendations and approved moving to the Request for Proposals (RFP) phase. Through several months of conducting our due diligence, we are down to one vendor. A final Board decision is scheduled for October. A tremendous advantage with AMI is immediate leak detection inside the customer's home or business, or water service line, a tremendous water conservation and cost savings tool. In the 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 water use for a customer.
3. **CMMS – Computerized Maintenance Management System** – This system for customer service requests, work orders, inventory and asset management is part of our Strategic Plan to improve how we manage our day to day operations and will utilize the CityWorks software program. This is one of those projects that is not so visible, but has the potential to greatly improve our operations to deliver better customer service, productivity and scheduling.

We will also have a web portal/mobile app customer request in place at the completion of the project, likely 2020.

4. **ACSA Capital Projects Update** – The adopted FY 2020 Capital Improvements Program (CIP) started July 1<sup>st</sup> and is a \$10.4 million program (let us know if you would like any detailed project maps or to schedule a tour on any of the projects). Highlights and current major projects are detailed below:

- **Glenmore Water Tank Project** – This project is for system redundancy and emergency backup. The present line extends 4 ½ miles to Glenmore. The tank is completed, and final work has been completed on the pump station. We have also designed some additional security measures into the project. Work on the project is complete, with the tank in full operation.
- **Operations Center Expansion Study (Master Plan)** – Study underway to look at the short and long-term future of ACSA properties (Crozet, Avon Street, and Pantops) and develop a master plan for the long-term needs of the organization as we continue to grow and add customers. Interior space renovations are complete and additional parking is scheduled for construction this fall. A conceptual site development plan for Avon Street is under discussion with the County Planning staff (more detail in a later item).
- **Camelot Water Main Replacement** – Replacement of nearly 50-year-old water mains that are also undersized and deteriorating. Easement acquisition is underway.
- **Scottsville Water Main Replacement** – Replacement of an aging water main along East Main Street. The project will be rebid late Fall 2019 to generate more competitive bidding interest.
- **Ashcroft Water Pump Stations Improvement** – This project will upgrade two existing water pump stations, which will result in quicker refill of the storage tank and improved water quality. Construction completion in October 2019.
- **Peter Jefferson Place Pump Station Improvements** – This pump station is operating inefficiently, and a study was completed to determine the best solution to improve it. Project construction is anticipated to begin end of September with a March 2020 completion.
- **Glenmore Drainage Basin Sewer System Rehabilitation** – We have seen wet weather issues in the Glenmore system to the point that this drainage basin has become a priority. Manhole rehabilitations are nearly completed.
- **Madison Park Pump Station Upgrade** – Constructed 33 years ago, by a private development, and the original equipment is wearing down, building undersized, and not able to install SCADA (computerized monitor). The plan is to replace this pump station on-site. Design work is at the 60% stage.
- **Oak Forest Sewer Pump Station Abandonment** – 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. We have completed design, and completed acquiring easements. Project has been advertised for bids with bid opening early October.

- **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 90% completion. A community meeting on the project was held in late September.
- **Meriwether Hills Water Main Replacement** – This water main is reaching the end of its useful life and is in need of replacement. This is another of the former well system mains. Project is under construction along the Owensville Road corridor, and is 45% complete.
- **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, are being completed.
- **SCADA (computerized monitoring)** – A three phased project is nearing completion for over 40 water and wastewater facilities in the ACSA system. 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 completed to hire a contractor through a competitive negotiation process.
- **Crozet Phase IV Water Main Replacement** – 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 25% stage.
- **Hessian Hills Water Main Replacement** – 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. Design work is at the 50% stage, with project completion planned for 2021. Work along Barracks Road and Georgetown Road will have to take place at night due to high traffic volumes during the day.
- **Hollymead Drainage Basin SSES** – 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 and flow monitoring continues.

- **Redfields Sewer Pump Station Abandonment** – This wastewater pump station was constructed 23 years ago by private development and the parcel is too small to add an emergency standby generator. The Maintenance Department must rely on a portable pump to operate this station during power outages. With the development of Wintergreen Farm Subdivision, ACSA staff saw an opportunity for a sewer main extension that could eliminate this pump station. Now that the sewer main extension is in place the timing is perfect for abandoning this wastewater pump station. Construction anticipated in early 2020.
- **Vulnerability Assessment** – 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.
- **Sewer Force Main Condition Assessment** – This project utilizes a computerized “SmartBall” that is flowed through the force main capturing assessment data (via transient pressure monitoring technology) to determine any problem areas that require correction or further detailed investigation.
- **Energy Audit:** 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 will be conducted of all systems, including operation and maintenance procedures to determine where energy conservation can be improved.
- **Avon Street Maintenance Yard:** As part of the Operations Center Expansion Study our consultant reviewed all properties owned by the ACSA that could be utilized as we continue to grow. The Avon Street property has long been held as a future location to build additional facilities in a central location, as needed. The current Maintenance Yard at our Operations Center is becoming overcrowded with equipment and materials, causing us to locate some equipment and larger materials 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 much larger vehicle and materials storage facility. We are in consultation with Albemarle County Planning staff on this project proposal.
- **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.

- **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.
- **Ednam Water Storage and Northfields Tank Recoating:** As part of our new program of regular water storage tank cleaning and inspections it was determined that the tanks were exhibiting generalized degradation of the paint coating on either the interior or exterior surfaces. The Ednam Tank was constructed in 1977 and was last painted in 1997. The original Northfield Tank was replaced in 2000 when the pump station was renovated. To be proactive in extending the useful life of our water tanks, we are moving forward on the Ednam and Northfields Tanks to be recoated. Ednam Tank recoating is expected to begin end of September.
- **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. At that time the existing exclusion meters were "grandfathered" and allowed to stay in place unless the irrigation system was voluntarily abandoned. 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.
- **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 CIP Crew.

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

Attachments: ACSA Customer Newsletter



# news & updates

QUARTERLY NEWSLETTER

## A Thank You...

*Dear Customer,*

Earlier this year, the ACSA sent all 20,000 of our customers a survey to give us helpful information about the job we are doing to provide you with the highest quality water and services. We are proud to report that nearly 1,200 of you took the time to send us your thoughts about our work. We greatly appreciate the feedback.

During our July 18 board meeting, ACSA staff will provide a full, detailed report about the findings but we can give you a sneak peak in this newsletter. As you can see on the reverse side, you gave the ACSA more than a 90% satisfaction rating; our rating for "overall quality of customer services" was 97.52%. Where we received some very pointed comments about dissatisfaction, I asked our staff to reach out to every customer who submitted an issue to see how we could assist them. We've received very positive reaction to this personal follow-up.

This survey was also designed to provide additional direction to our Strategic Plan, which will carry the utility through 2022. For example, we received a great deal of support for our leak notification program; it will be an integral part of our Advanced Metering Infrastructure project under the Strategic Plan. Thanks to your input, we feel confident the Plan will address the opportunities that lie before us, as well as whatever challenges we may face in the future.

We thank all of you, our customers, who gave your time and energy to respond to our survey and we look forward to living up to the levels of satisfaction you have in our services.



*Gary O'Connell, Executive Director*

### Water Quality Reports

Find out how granular activated carbon is enhancing the already high quality of our drinking water.

Visit [serviceauthority.org](http://serviceauthority.org) for our latest water quality reports. They detail how the ACSA is ensuring you enjoy safe, clean water.

### LEARN FROM YOUR LAWN

Keep your grass green and conserve water this summer!

- Use the BAREFOOT test. Walk your lawn. If you see footprints, water. If it bounces back, you're OK.
- Water the lawn, NOT THE SKY! Water early and late in the day to avoid wasteful evaporation.
- Don't mow so LOW! If you cut the grass higher, the taller blades will protect the soil from the heat.



# 2019 Customer Survey Results

Below are the core results of the ACSA's 2019 Customer Survey. As you can see, there's a lot of praise for our staff. While this is terrific news, there's always room for improvement and we will continue striving to deliver the highest quality services. A full report will be presented at our July Board meeting. Thank you to all of our customers for providing this essential feedback.

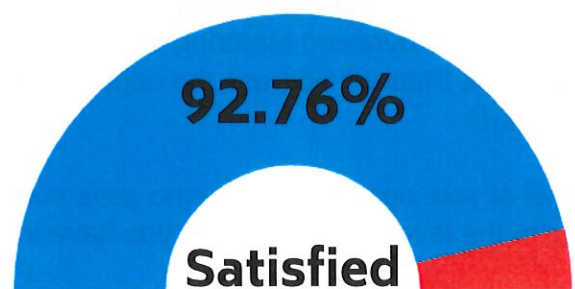
## Overall Customer Satisfaction



## Customer Service Quality



## Water Quality



## Information about Water Rates



## Information about Your Water



## Communication



## New Water & Sewer Rates

The ACSA recently approved a rate increase for Fiscal Year 2020 that lets us improve our water and sewer infrastructure for future generations while covering expenses.

For more information, visit [www.serviceauthority.org/finance/FY20BudgetRates.pdf](http://www.serviceauthority.org/finance/FY20BudgetRates.pdf).