

MEMORANDUM

To: Albemarle County Board of Supervisors
From: Gary O'Connell, Executive Director 
Date: January 9, 2019
Re: Albemarle County Service Authority (ACSA) Quarterly Briefing
cc: Mr. Jeff Richardson, County Executive; ACSA Board of Directors;
ACSA Leadership Team

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

1. **Imagine a Day Without Water 2018** – This continues our very successful student art contest. With the theme "How do you save water", 266 students submitted posters. This was an excellent way to get our school students (teachers and families) involved in the value of water and water conservation. The winning artwork is attached. Their winning artwork is on display in the ACSA lobby.
2. **Budget and Rates** – The ACSA FY 2020 Budget and Rates will be presented to the ACSA Board at their April meeting for a June adoption. The ACSA Capital Improvements Program (CIP) will be presented to the ACSA Board at their March meeting. A major part (over 60%) of the ACSA Budget and Rates goes for treatment costs to the Rivanna Water and Sewer Authority (RWSA), which has major projects totaling near \$150 million in their five-year program. Yet the ACSA average residential bill is under the statewide average, and 22% less than a comparable City of Charlottesville water and sewer bill.
3. **Winter Customer Newsletter and Customer Survey** – Included with the February bill will be a customer newsletter with winter weather water tips and pertinent ACSA information. We send this newsletter twice a year. Also, we will be sending a customer survey on ACSA services to obtain customer feedback for our new Strategic Plan.

4. **2019-2022 Strategic Plan Process** – We have completed a number of reviews and assessments to identify strategic “GAPS” to address in the future: national performance measure benchmarking to 129 utilities; peer Utility Manager Best Practices Review Panels, and Employee “Insights” Survey. This fall we focused on an Effective Utility Management (EUM) assessment strategic planning tool and additional feedback. We will have a customer survey available in February to obtain feedback on ACSA services for the Strategic Plan. A new three-year (2019-2022) Strategic Plan is planned for Board adoption in March 2019. The two major Strategic Plan focus areas are implementation of AMI (advanced metering) and CMMS (computerized maintenance management system – customer service requests, work orders, inventory and asset management). Additional goal areas: continuation of succession planning; additional Best Practices Reviews; finalize Emergency Response and Business Continuity Plan with annual exercises; financial system upgrade; cyber security assessment; completion and implementation of the long-range Facility Master Plan; water audits (water conservation and water use tool) and an ACSA facilities energy audit. Our overall goals are safe, clean, and reliable Albemarle Water.
5. **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. This has been a six-month long feasibility study process. The ACSA Board is reviewing the feasibility study recommendations and has approved moving to the RFP phase. A final Board decision is scheduled for November. 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.
6. **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. 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 are in the process of finalizing a contract with one of the best practices software vendors, to start implementing during 2019. We will have a web portal/mobile app customer request in place at the completion of the project.
7. **ACSA Capital Projects Update** – The adopted FY 2019 Capital Improvements Program (CIP) started July 1st and is a \$6.2 million program (let us know if you would like detailed project maps or a tour on any of the projects); a copy of the system-wide map showing CIP projects is attached. 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, with final work this winter to complete the pump station. We have also designed some additional security measures into the project. Work on the pump station began in June, and is scheduled to be finished in February.
- **Orchard Acres Water Main Replacement** – Older (59 years) water mains to be replaced in Crozet. This project has been completed.
- **Camelot Sewer Rehabilitation** – Sewer replacement, relining, and manhole repairs to reduce infiltration and inflow are needed for a well-functioning sanitary sewer. All the relining work is complete, overall project has a planned completion in February.
- **ACSA Facilities Master Plan** – Study underway to look at the short and long-term future of ACSA properties (Crozet, Avon Street, Pantops) and develop a master plan for the long-term needs of the organization as we continue to grow and add customers. Additional parking and interior space renovations are the next step. A conceptual site development plan for Avon Street is under discussion with the County Planning staff. A draft master plan has been submitted.
- **Camelot Water Main Replacement** – Replacement of nearly 50-year-old water mains that are also undersized and deteriorating. Design work is underway at the 90% stage.
- **Scottsville Water Main Replacement** – Replacement of an aging water main along East Main Street. We are at the 100% design stage on this project, with easement acquisition completed. The project bid has been received to finalize a contract.
- **Barterbrook Water Main Replacement** – Replacement of aging and badly deteriorating water mains along Solomon Road, North Berkshire Road, and Inglewood Drive. We have had a series of water main breaks in this area and replacement is needed. Construction is complete.
- **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. Contract was awarded in July, with construction completion in April 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 is under contract with a June 2019 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. Most manhole rehabilitations have been completed, with a small number left to finish to complete this project.
- **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. We are at the 20% design 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 and eliminate this aging pump station and avoid an expensive upgrade. We have completed design, and now acquiring easements.
- **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 50% completion.
- **Meriweather 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. Design work has begun, and we are at the 95% stage of design documents, and easement acquisitions have begun.
- **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 begun, and are 75% complete on the investigation portion of this project.
- **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.
- **Security Projects** – From a detailed Vulnerability Assessment of all ACSA facilities, a number of security projects to reduce risk were proposed in the Capital Improvements Program for completion in 2019.
- **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.
- **Hessian Hills Water Main Replacement** – The water mains in the Hessian Hills area are of a similar age and material as the water mains in the Barterbrook Phase 2 Project, plus they are in the same general area. By extension we are assuming their condition is similar with respect to 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 recently began, with project completion in 2021.

- **Recoating Scottsville Water Storage Tank** – As part of our program of regular water storage tank cleaning and inspections, it was determined that the Scottsville Tank was exhibiting generalized degradation of the paint coating on the interior and exterior surfaces. This tank has not been recoated since its construction approximately 25 years ago. To be proactive in extending the useful life of our tanks, we have scheduled for the Scottsville Tank to be recoated this spring.
- **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.
- **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. Completion anticipated at the end of 2019.

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.

Hope you had a Happy Holiday and a welcome start to the New Year 2019.

Attachments:

- 2018 Imagine a Day without Water Art Contest Winners and Artwork
- System-Wide CIP Projects Map

November 19th, [Click Here for Press Release](#)
Awards Ceremony : November 27th, 5:30pm - 6:30pm
Albemarle County Service Authority Board Room, 168 Spotnap Road

2018 Imagine a Day without Water Art Contest Winners:

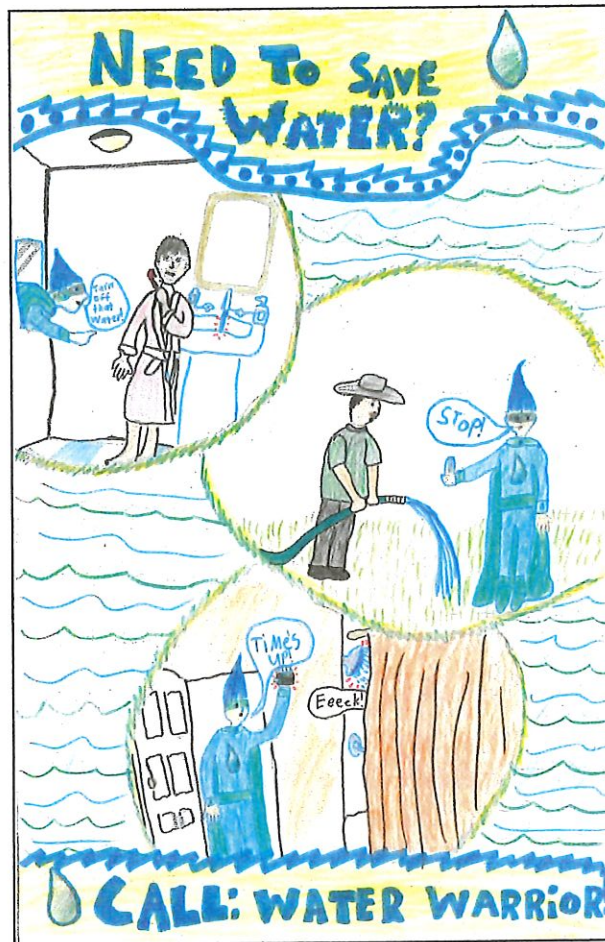
The City of Charlottesville, the Albemarle County Service Authority (ACSA), and Rivanna Water & Sewer Authority (RWSA) participated in their fourth annual "Imagine a Day without Water" campaign to educate and inspire the community about the value and importance of water that encourages water conservation in our everyday lives.

This national campaign consisted of a public awareness event as well as an art contest where students from throughout the City and County were asked to illustrate "How do you save water?" Judges from the City, ACSA, and RWSA evaluated the artwork for creativity, originality, and incorporation of the contest's challenge question. Of the 266 poster entries received from students in Charlottesville and Albemarle County, one winner was chosen from each of four grade divisions. In addition, the top 40 entries were available to the public to view online and vote for a favorite art poster; with over 1200 online votes, a fan favorite was selected. All 5 winners will receive a \$200 gift card, water conservation goodie bag, and have their artwork displayed around Charlottesville.

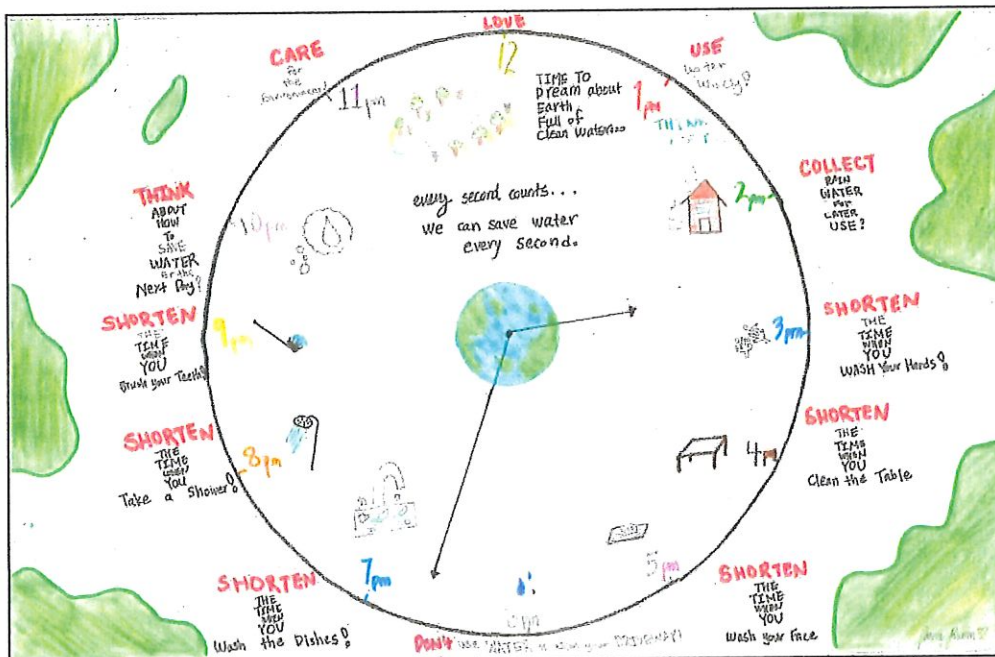
The winners for the 2018 Imagine a Day without Water Art Contest are:



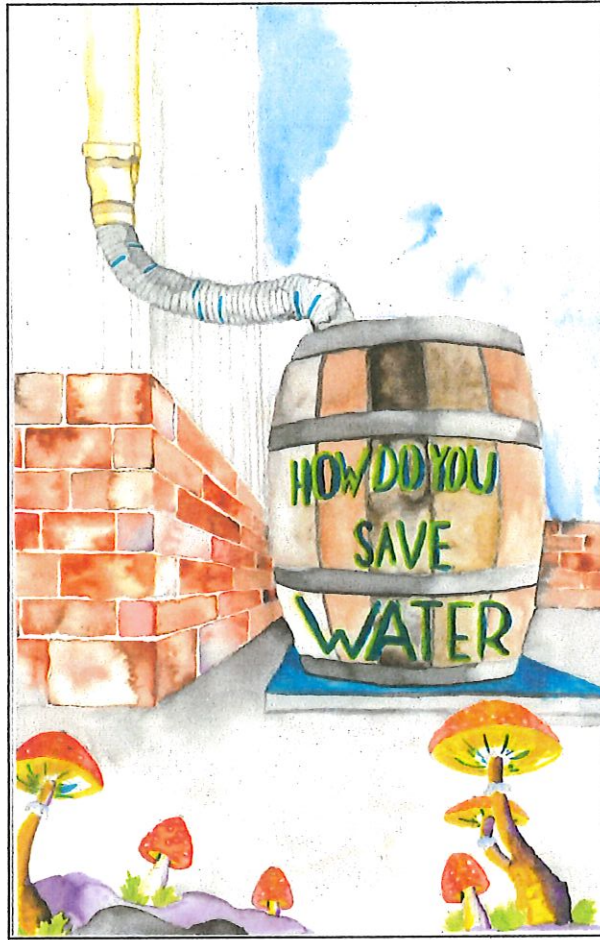
1st – 2nd Grade: Ben O'Hare, Johnson Elementary, Grade 2



3rd – 4th Grade: Rowan Powell, Woodbrook Elementary, Grade 4



5th – 6th Grade: Jamie Kwon, Sutherland Middle School, Grade 6



7th – 8th Grade: Bryce Yates, Charlottesville Catholic School, Grade 7



Fan Favorite: Manan Jani, Agnor Hurt Elementary, Grade 5

In addition, teachers were encouraged to promote student participation and 4 were chosen to receive a \$200 gift card to be used for classroom projects:

Lily Brookman, (Jackson Via Elementary)
Atlanta Hutchins (Crozet Elementary)
Desmond Cormier (Buford Middle School)
Kim Taylor (Village School)

[Click here for the full press release](#)

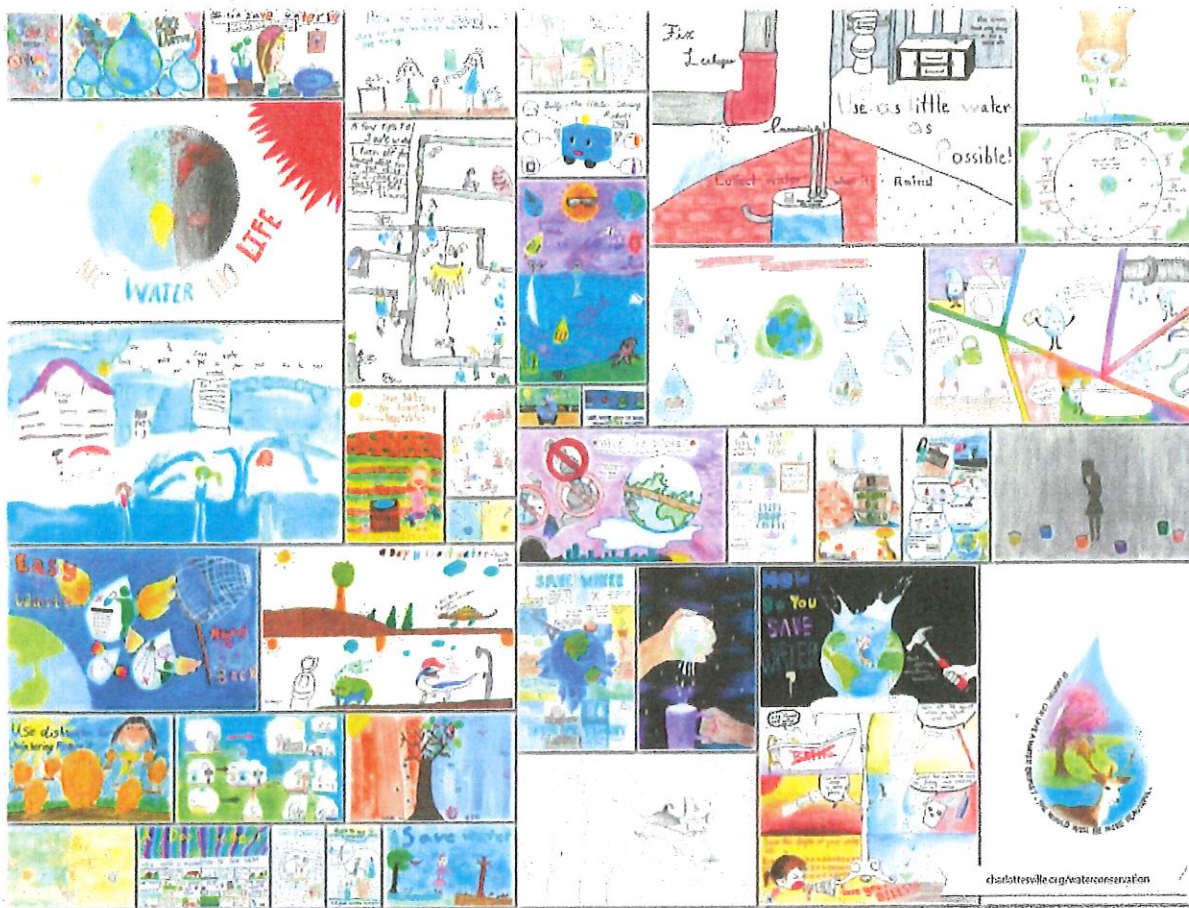
2018 Imagine a Day without Water Fan Favorite Voting

We had over 265 entries to the 2018 Imagine a Day without Water Student Art Contest! We had judges represented from the City, ACSA, and RWSA; the judges determined the top 40 entries spanning all grade divisions (top 10 from each division) to be considered for the fan favorite category. Please share your favorite with your friends and family. Winners for the Fan Favorite and age categories will be announced Monday, November 19th.

Winners and participants will be recognized at our awards ceremony on **November 27th from 5:30 - 6:30 pm** at the Albemarle County Service Authority's Board Room (located at 168 Spotnap Road). The awards ceremony is open to the public.

Awards Ceremony Facebook Event: [Click Here](#)

Imagine A Day Without Water



Top 40 art posters from the 2018 Imagine a Day without Water Art Contest.

Albemarle County Service Authority

Capital Improvement Projects by District

