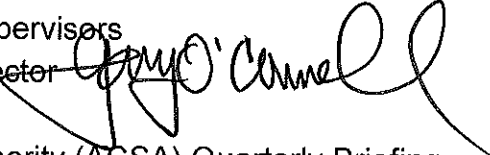


MEMORANDUM

To: Albemarle County Board of Supervisors
From: Gary O'Connell, Executive Director 
Date: October 4, 2017
Re: Albemarle County Service Authority (ACSA) Quarterly Briefing
cc: Mr. Doug Walker, Interim County Executive; ACSA Board of Directors;
ACSA Lead Team

We once again appreciate the opportunity to share what is going on at your water agency, the Albemarle County Service Authority. We pride ourselves on safe, clean, reliable water, and all our employees work hard every day to keep that trust in our water.

1. **Imagine a Day Without Water** – Along with our water partners (City, RWSA), we are sponsoring a student art contest to help the community think about and understand the importance of safe, clean, reliable water. Most of us do not think about the true value of public drinking water in our daily lives, we often take our clean water for granted. Last year we had 440 area school students participate in this art contest. This year's theme: "Why does every drop count?"
2. **Strategic Plan Updates and Successes** – The ACSA is in year four, of our five-year plan. We have a number of initiatives focused on our product of water quality: GAC (advanced treatment at all five of the water treatment plants), system flushing, water tank maintenance projects, upgrading and replacing a number of aging water lines in the system. We are adding, or improving, new customers' communications to educate them on ACSA services and water quality: website, social media, customer brochures and community water conservation and water education events. We are regionally active in an Emergency Preparedness Plan with our regional water partners (City, RWSA, and UVa). We are in the midst of a long-term Facility Operations Master Plan, and have recently renovated our Customer Service Center at the Pantops Administration Building. We will be completing the current Strategic Plan next July, with a focus from now until then on these items: updating Departmental SOPs (Standard Operating Procedures), leaded joint fire hydrant replacement, a Best Practice's Management

Review, AMI (electronic metering) Feasibility Report, CMMS (computerized maintenance system, electronic work orders), and a Succession Plan. In the spring, we will begin planning for a new Strategic Plan for the next five-year period (2018-2023).

3. **AMI (Advanced Metering Infrastructure or Electronic Metering)** – One of our strategic plan items is to explore the various AMI technologies that are available in the water metering world. Most electronic and gas utilities, and larger water utilities, have already converted to the AMI technology. This feasibility study will evaluate our technology options and look closely at the needs of our customers. A tremendous advantage with AMI is immediate leak detection inside the customer's home or business, a tremendous water conservation and cost savings tool.
4. **Rate Study** – Over the next several months we will be updating our rate model through a very detailed review of all ACSA fees and rates, including the 4 tiers of water rates and the developer new connection fees. Our rates still continue to be below the statewide average, and are 22% lower than a comparable customer bill from the City. We, as part of our strategic planning, update the rates each budget cycle and every five years conduct a detailed review of the rate model, which is what we will be doing this fall/winter. The results, upon ACSA Board approval, will become part of the FY 2019 Budget and Rates next year.
5. **ACSA Jurisdictional Service Area** – Attached is a map showing the ACSA Service Area; the bulk of which is the urban area, along with Scottsville, Crozet, Glenmore and Red Hill. Some community questions have arisen about the ACSA service area, most recently for VDOT on 250 west. The ACSA is only authorized to provide water and wastewater services in those areas approved by the Board of Supervisors.
6. **ACSA Capital Projects Update** – The adopted Capital Improvements Program (CIP) totals \$5.6 million in projects. Below is an update for each of our current capital projects:
 - **Water Tank Maintenance Program** - This is a comprehensive, multi-year and ongoing water storage tank maintenance and rehabilitation program for the eight tanks in the ACSA system. The goal is to have an ongoing review of our tanks to ensure they are kept in good condition to be able to serve the community. This year inspected and cleaned Red Hill, Stony Point, Ashcroft Upper and Northfields tanks.
 - **Westmoreland Water Main Replacement** – This project replaces nearly 55-year-old water mains that have recently experienced

multiple water leaks. Construction of the new water main is complete, with services having been connected. City Gas is following up this construction with new gas lines to service the neighborhood. Once the gas line is installed, final paving will occur.

- **Berkeley Water Main Replacement** – This project replaces water mains in the Berkeley subdivision that are failing and leaking. The lines are nearly 60 years old. Work has been completed, with 100% of the water main installed. All of the customers in this area have had their services switched over to the new water mains. This is another project that has been coordinated with City Gas, and new gas mains will be installed in October. Once that gas work is complete, paving will occur.
- **Glenmore Water Tank Project** – This project is for system redundancy and emergency backup. The present line extends 4 ½ miles to Glenmore. The project design is complete and will soon be under contract for a new water tank to serve the Village of Rivanna. We had been waiting on private development site grading that affects the new water main location and depth which is now completing. We have also designed some additional security measures into the project.
- **Crozet Phase 3 Water Main Replacement** – Design work to replace older water mains in Crozet is complete and easements have been obtained. A contract has been awarded and the contractor has begun construction.
- **Orchard Acres Water Main Replacement** – Older (59 years) water mains to be replaced in Crozet. Design is complete and easements have been obtained. The project is currently out for bids.
- **Camelot Sewer Rehabilitation** – Sewer replacement, relining, and manhole repairs to reduce infiltration and inflow are needed for a well-functioning sanitary sewer. Work is underway.
- **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. A Phase I relocation of the maintenance offices on site has been completed. Additional parking and interior space renovations are the next step. A site development plan for Avon Street is under discussion with County Planning staff.
- **Camelot Water Main Replacement** – Replacement of nearly 50-year-old water mains that are also undersized. Design work is underway at the 50% stage, and field fire flow testing is being scheduled.
- **Scottsville Water Main Replacement** – Replacement of an aging water main along East Main Street. We are in the 90% design stage on this project, with field surveying completed.

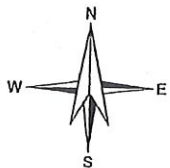
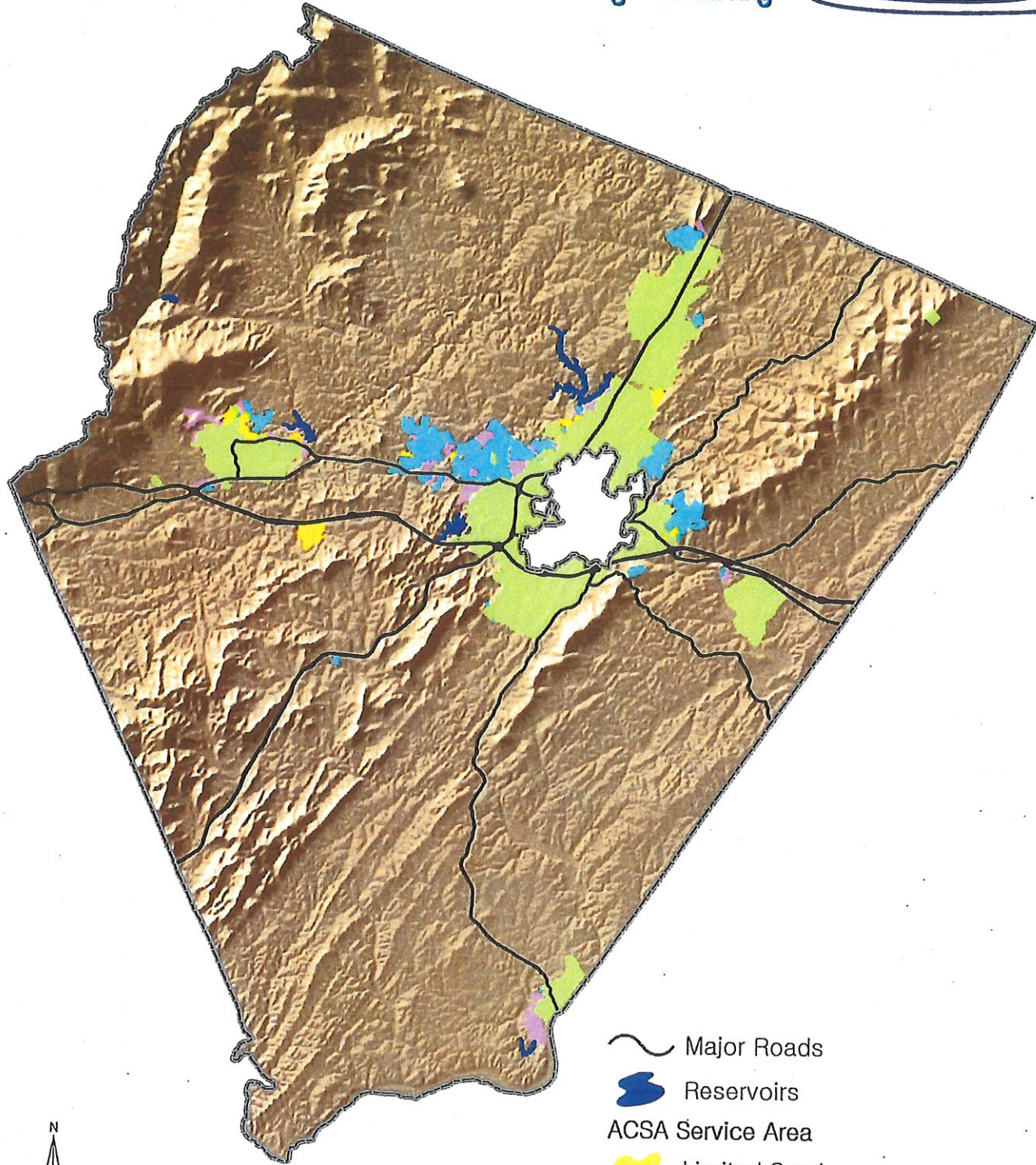
- **Barterbrook Water Main Replacement** – Replacement of aging and deteriorating water mains along Solomon Road, North Berkshire Road, and Inglewood Drive. We are at the 90% design stage on this project. Project is moving forward on easement acquisition.
- **Fontana Loop Water Connections** – New water main loops at Verona Drive and Olympia Drive will create secondary water feeds for system redundancy and emergency backup to the Fontana subdivision. Construction is underway.
- **West Woods Water Main Replacement** – The project completes the water main replacements along West Pines Drive. Construction is complete, with all the services connected. Project restoration work nearing completion.
- **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. 100% design documents are complete.
- **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. Design is currently underway for pump and piping replacement.
- **Glenmore Drainage Basin Sewer System Study** – We have seen wet weather issues in the Glenmore system to the point that this drainage basin has become a priority. The study is underway and approximately 90% complete.
- **Airport Sewer Collector Upgrade Evaluation** – The increased density in this area (Hollymead Town Center and Willow Glen) at build-out will exceed the capacity of the existing sewer main. This project will develop a plan for upgrading the sewer capacity of this collector line. The final engineering report has been completed, field surveying completed, and the project is complete.
- **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 controls). The original plan was to replace this pump station on-site. An alternative now being evaluated is to connect to a new gravity sewer main extension, with no pump station required. The connection would be to a proposed extension from the Morey Creek Interceptor to the proposed UVa development known as Ivy Mountain (the old Kluge Children's hospital site on Ivy Road).
- **Oak Forest Sewer Pump Station** – 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 are in the 50% design stage and under review.

- **AMI Feasibility** – Advanced Metering Infrastructure project feasibility to evaluate various electronic metering systems to replace our current handheld reading system. Request for Proposals is being developed.
- **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 phase will begin in October.
- **Meriweather Hills Water Main Replacement** – This water main is reaching the end of its useful life and is in need of replacement. Another of the former well system lines. Design is scheduled for FY 2018.
- **Pantops Sewer Study** – Area study to reduce wet weather infiltration and inflow (I/I).
- **Lewis Hill-West Leigh Water Connection** – The existing connection is at risk of failure, due to stream encroachment, to the point it has been taken out of service. This project will re-establish the water connection from Lewis Hill to a recent water line replacement along Sheffield Road in West Leigh.
- **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.







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 Jurisdictional (Service) Area Map
- Imagine a Day Without Water – “Why does every drop count?”



0 3 6 9 12 Miles

-  Major Roads
-  Reservoirs
- ACSA Service Area
-  Limited Service
-  Water Only
-  Water Only To Existing Structures
-  Water and Sewer

2017 School Art Contest

Imagine a Day without Water



Open to:

All City of Charlottesville
& Albemarle County Public,
Private, and home schools
Grades 1st to 8th

Theme: "Why does every drop count?"

Water is essential for life. You need water for everything from brushing your teeth, growing the food you eat, and making the things you use everyday. Why is water important to you and why does every drop count?

SEPT 12TH - OCT 16TH

Contest Rules

- ✍ All entries must convey the theme of the contest:
"Why does every drop count?"
- ✍ Entries must be the work of one individual student, no collaborations.
- ✍ Multiple entries from the same student will be accepted.
- ✍ Original artwork only. Posters submitted with copyrighted characters or images will not be accepted.
- ✍ **Size: 11" x 17"**, landscape; any posters larger or smaller in size will be disqualified.
- ✍ Any medium may be used (paint, colored pencils, crayons, markers, etc.) No 3-D entries, please.
- ✍ Teachers may submit for students or students can submit independently through their parents.
- ✍ Teachers can submit multiple entries at once, arrange pick-ups at school, mail to or drop off at Charlottesville Public Works Building (305 4th St. N.W.).

PRIZES!

✓ For the Students:

\$200 gift card

One winner in each category

- Grades 1-2
- Grades 3-4
- Grades 5-6
- Grades 7-8
- Fan Favorite (voting Nov 1-Nov 14)

✓ For the Teacher:

Every teacher whose students submit posters will be entered into a drawing to win a **\$200 gift card** for classroom projects. The more students that participate will increase the odds of winning. 4 teachers will be selected!



Imagine a Day Without Water
October 12, 2017



www.charlottesville.org/artcontest

Official Entry Form



2017 Charlottesville "Imagine a Day without Water" Art Contest: Why Does Every Drop Count?

Name: _____

Age: _____

School: _____

Grade: _____

Division Category: Grades: 1-2 ☐
(Please check one)

Grades: 5-6 ☐

Grades: 3-4 ☐

Grades: 7-8 ☐

Teacher Sponsor Name (if applicable) : _____

Home Phone Number: () _____

(Parent/Teacher signature)

E-mail Address: _____

*Must be completely filled out to be a valid entry. **Please write legibly!***

Posters become the property of the contest sponsors (City of Charlottesville, ACSA and RWSA) and will not be returned. The contest sponsors have the right to display or otherwise use the submissions for future promotions.

Deadline for all poster entries is Monday Oct 16th, 2017! Please attach this form to the back of your poster!

Must return entries to front desk at the school or Public Work's Administration building at 305 4th St. N.W.

- ✍ Winners will be recognized at special ceremonies and their work will be exhibited in public venues.
- ✍ A panel of judges (to be selected by the contest sponsors) will select the winning posters for each grade division.
- ✍ Posters will be judged on message (keep in mind the theme), originality, creativity and overall presentation.
- ✍ Posters must be returned by October 16th to their school's front office or the Public Work's Administration building located at 305 4th St. NW by the end of business day
- ✍ The Fan Favorite winner will be selected by online voting from the top entries (number based on entries). The link with the eligible entries will be available at www.charlottesville.org/artcontest starting on November 1st through November 14th.
- ✍ One student may not win both the fan favorite and judges pick, and if the student is chosen for both, the fan favorite runner-up will win the Fan Favorite prize.
- ✍ The winners of all categories will be announced by November 17th, 2017.

For updates and full list of rules and contest information please go to our website. www.charlottesville.org/artcontest.

QUESTIONS?

Contact:
Jill Greiner

Water Conservation Program Coordinator
434-970-3877

waterconservation@charlottesville.org

Come to our Imagine a Day without Water event on the Downtown Mall, **Wednesday, October 11th from 11:00am to 1:00pm** and learn how you can make every drop count! Please check our website for more information.

Important: Each poster **MUST** have the official entry form attached to the back.

All information must be filled in completely and legibly. Illegible and incomplete entries will be disqualified. Please print or type ALL information. Entry forms may be copied if needed.