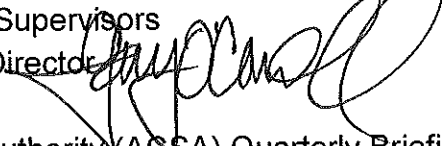


# MEMORANDUM

**To:** Albemarle County Board of Supervisors  
**From:** Gary O'Connell, Executive Director   
**Date:** September 23, 2016  
**Re:** Albemarle County Service Authority (ACSA) Quarterly Briefing  
**cc:** Mr. Tom Foley, County Executive; ACSA Board of Directors;  
ACSA Lead Team

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We do thank you for the continuing opportunity to update and brief the Board of Supervisors on our work to provide safe, clean, and reliable water at a good value. This update includes current ACSA issues of note, and updates on our capital projects. We are providing this report as background for your October 5th meeting:

1. **Imagine a Day Without Water Event and Student Art Contest** – With our water partners, we celebrated the second “Imagine a Day Without Water” event on the downtown mall on September 16<sup>th</sup>, with good community participation and good media coverage. The theme is asking “could you go a day without water?” Think about how many ways we use water: to drink, make food, shower, flush the toilet, brush our teeth, or fight a fire and more! Again this year, with our water partners, we are sponsoring a school art contest around the theme of “Imagine a Day Without Water.” The contest runs through October 14<sup>th</sup>. Last year we had over 500 entries from area schools. We are appreciative of the support from the County schools for their involvement and participation.
2. **Meter Replacement Program** – In March 2011, the ACSA began installing a new digital meter type that improved the ability to record consumption on customer accounts. The meters also enabled the ACSA to query the meter and analyze consumption for improved customer service. This information was often used in leak investigations and assisted customers in identifying and diagnosing inadvertent use of water or leaks.

Beginning in October 2015, the ACSA noted an increase in meter failures and began investigating factors related to those meters. These

meters were under warranty and were replaced accordingly by the meter manufacturer.

Through further discussion with the meter manufacturer, it was noted that meters manufactured prior to July 2014 were more susceptible to failure from the elements given the design of the meters. A design change in the manufacturing of the current meters addresses this issue. The ACSA identified 3,943 meters in service that had been manufactured during this time period.

Due to the increased risk of failure and the fact that the meters remained under warranty, the meter manufacturer proposed a comprehensive replacement/change-out project to replace all of the 3,943 meters noted above that had not already been replaced by ACSA personnel. The meters and all associated labor costs with the replacement project will be provided by the meter manufacturer. There is no cost to the ACSA or its customers and the replacement meters will be under full warranty by the manufacturer. The project is expected to begin late October and conclude in December. The project will replace all meters susceptible to failure and increase reliability of meter operation.

3. **Hydrant Meter Program** – The Board recently adopted updates to the ACSA Hydrant Meter Program to better manage the water hauler use from fire hydrants. We issue about 20 yellow hydrant meter assemblies for contractor and water hauler use. They are authorized to use one of six yellow hydrants designated for water haulers in various parts of the county. Authorized use will always be with a yellow hydrant meter and the user will have a copy of our permit. Also, contractors with permission can use a designated fire hydrant near their construction site. We regularly are checking use, and monthly bill the hydrant meter user for consumption.
4. **Strategic Plan** – We are in the fourth year of our five year Strategic Plan. Major accomplishments during this past year include: overhaul of the employee performance evaluation plan; completion of the first phase of SCADA (computerized controls); new financial management system; continuing emphasis on our Environmental Management System (EMS); waterline replacement program; sewer system rehabilitations, completed and met the DEQ Consent Order requirements; Water Tank Maintenance Program (new annual); Vulnerability Assessment; pump station upgrades; site security evaluation (by Albemarle County Police Department) with subsequent security system and building upgrades. In 2017, we will begin preparing for a new Strategic Plan to guide us into the future.

5. **Glenmore Wastewater Agreement** – A long-term agreement amendment for Glenmore Water Resource Recovery Facility (WRRF) was approved. Places the financial responsibility of all capital improvements to the WRRF in the hands of the ACSA. Part of the update was to study the capacity of the Glenmore WRRF, which we verified can accommodate the built-out development in the comprehensive plan for the Village of Rivanna.
6. **Vulnerability Assessment** – In partnership with the City, RWSA, and UVa water and sewer utilities, we are in the midst of reviewing all our facilities for emergency planning purposes to identify any gaps or facility updates that are needed. This emergency planning is to reduce our system's risks and be better prepared for future natural or man-made disaster. In addition to the regional water utilities, the public safety departments are actively involved.
7. **ACSA Capital Projects Update** – This section will update some of our current Capital Improvement Projects (CIP), and share some of the new projects that were approved in the FY 2017 CIP Budget.
  - **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 we are scheduled for inspection and cleaning on the Mosby Mountain, Avon Park, Ashcroft Lower and Ednam tanks.
  - **Key West Water Main Replacement** – The installation of a replacement water main has been nearly completed. Replacement and the addition of new fire hydrants will improve the fire service in the neighborhood. We are nearing full completion of this project, with a short section of pipe to complete.
  - **Dunlora-Key West Water Interconnect** – A companion project is a new interconnect water main under the river that will provide additional redundancy and emergency backup, as well as improve water quality. The contract has been executed.
  - **Westmoreland Water Main Replacement** – This project has been bid, and will be starting shortly, which replaces nearly 50 year old water mains that have recently experienced multiple water leaks.
  - **Michie Tavern Water Main Replacement** – Work is completed on this replacement waterline. This work included boring under Route 20 from the beginning of Piedmont Virginia Community College to the adjacent UVa Blue Ridge property. The new line replaces one that was over 70 years old.
  - **Ivy Water Main Extension** – A DEQ project to provide public water to several residences and businesses in the Village of Ivy along

Route 250 west that had contaminated wells by leaking underground fuel tanks. Initial design work was completed. DEQ is looking at abandoning the project. A community meeting is being scheduled.

- **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. Design is complete, and we continue to be at the stage of acquiring easements to then be able to go to bid. Easements have been difficult to obtain, and we are hopeful most will be obtained in the next month.
- **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 nearing bidding for a new water tank to serve the Village of Rivanna. Waiting on private development site grading that affects new waterline location and depth before the water tank project can be underway.
- **Ivy Road-Flordon Water Connection** – Part of our water system reliability and redundancy projects. The waterline on both sides of the railroad is complete and in service.
- **Ednam Water Pump Station Upgrade** – Another of the water system reliability and redundancy projects which will also increase the water pumping capacity. The project work has begun on the standby generator, and the temporary standby pumps. Electrical work for the new pumps has begun.
- **Crozet Phase 3 Water Main Replacement** – Design work to replace older water mains in Crozet is more than 90% complete. A public meeting was held on May 16, 2016.
- **Orchard Acres Water Main Replacement** – Older water mains to be replaced in Crozet. Design is complete and we are now in the easement phase of work.
- **Greenbrier Drive Sewer Replacement** – Part of the Hillsdale Drive Road Project, this short section of sewer main will be replaced. A significant cost savings by combining this sewer main replacement with the planned road project. We do not expect the utility work to begin until 2017.
- **Oak Hill Sewer Phase 2** – New sewer line to serve 20 homes in the Oak Hill subdivision. Community Development Block Grant funds through Albemarle County are being used to fund part of the project cost. Project is complete, with final restoration work underway.
- **Camelot Sewer Rehabilitation** – Sewer replacement, relining, and manhole repairs to reduce infiltration and inflow are needed for a well-functioning sanitary sewer.
- **ACSA Facilities Master Plan** – Study underway to look at the 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.

- **Camelot Water Main Replacement** – Replacement of nearly 50 year old water mains that are also undersized. Design work is underway.
- **Scottsville Water Main Replacement** – Replacement of an aging water main along East Main Street. We are in the 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. Field surveying for this project is underway.
- **Madison Park Sewer Pump Station Upgrade** – This pump station is in need of upgrading and conversion to modern operating equipment. The Preliminary Engineering Report is complete and design work should begin soon.
- **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.
- **West Woods Water Main Replacement** – The project completes the water main replacements along West Pines Drive.
- **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.
- **Glenmore Drainage Basin Sewer System Study** – This project replaces the Pantops study due to the Rivanna Pump Station work being delayed which affects a study of wet weather flows. We have seen wet weather issues in the Glenmore system to the point that this drainage basin has become a priority.
- **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. Study work has begun.

Thank you for the opportunity to share what is going on at your water agency, the Albemarle County Service Authority. I am more than glad to meet with you about any of our projects or facilities, or provide a tour if that would be useful.

Attachment



# Imagine a Day without Water

## School Art Contest

### Open to:

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

### Theme: "Imagine a Day without Water"

Could you go a day without water? No water to drink or use to make your food. No water to shower, flush the toilet, or brush your teeth. Firefighters couldn't put out fires, pools would be closed, and farmers couldn't water their crops.



## Contest Rules

SEPT 16<sup>TH</sup> - OCT 14<sup>TH</sup>

Imagine a Day Without Water  
September 15, 2016

- ✎ All entries must convey the theme of the contest: **"Imagine a Day without Water"**.
- ✎ Entries must be the work of one individual student, no collaborations.
- ✎ Original artwork only. Posters submitted with copyrighted characters or images will not be accepted.
- ✎ 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 Public Works Administration (305 4th St. N.W.).
- ✎ **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.
- ✎ Multiple entries from the same student will be accepted.

## 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 Oct 26-Nov11)

### ✓ 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!

Albemarle County  
Service Authority  
Serving • Conserving



RIVANNA  
WATER & SEWER AUTHORITY

[www.charlottesville.org/artcontest](http://www.charlottesville.org/artcontest)



# Official Entry Form



## Charlottesville "Imagine a Day without Water" Poster Contest

Name: \_\_\_\_\_

Age: \_\_\_\_\_

School: \_\_\_\_\_

Grade: \_\_\_\_\_

Division Category: Grades: 1-2 ☐

Grades: 5-6 ☐

(Please check one)

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 Friday Oct 14<sup>th</sup>, 2016! 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 4<sup>th</sup> 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 14<sup>th</sup> to their school's front office or the Public Work's Administration building located at 305 4<sup>th</sup> 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](http://www.charlottesville.org/artcontest) starting on October 26<sup>th</sup> through November 11<sup>th</sup>.

✍️ 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 16<sup>th</sup>, 2016.

For updates and full list of rules and contest information please go to our website. [www.charlottesville.org/artcontest](http://www.charlottesville.org/artcontest).

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.**



### QUESTIONS?

Contact:

Jill Greiner

Water Conservation Program Coordinator

434-970-3877

[waterconservation@charlottesville.org](mailto:waterconservation@charlottesville.org)

