Fulton County Public Works Quarterly Newsletter

CONNECTIONS

WINTER 2023





2023 Art Calendar Winners



Model Water Tower Competition



Commercial
Pretreatment Program
Overhauled



Consumption Behavior in Water Distribution



Fulton County Honors the 2023 Art Calendar Winners



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A MESSAGE FROM THE DIRECTOR

DAVID E. CLARK, P.E.



As we start the new year and look forward to what 2023 will bring, I want to thank everyone who sacrificed a portion of their holiday weekends over the past month addressing Public Works crises and emergencies. It is such an amazing feeling to know that all Public Works is so incredibly unselfish and will always rise to the occasion no matter what the event or ask. I am truly blessed to work with such an remarkable team. We may not be perfect, but we do what needs to be done to be as close as possible and to foster team engagement.

With any event, as a team it is always vital to:

- 1. Identify the problem and its cause;
- 2. Communicate within our team and with our customers, city partners, and elected officials;
- 3. Prepare a plan and back-up plan(s) as necessary to solve the problem;
- 4. Celebrate our accomplishments and victories.

It is the last point that we do not do nearly enough in my opinion. We are sometimes too focused on the next event, incident, or crisis to tackle. That itself is not a bad trait of our organization, but we all do hard, challenging work each day. It is important that we make it a priority to celebrate our accomplishments. As I outlined in the quarterly meetings, I anticipate several key projects being completed in 2023. I fully intend to celebrate our accomplishments and to recognize those that sacrificed so much to achieve them. Excellent Work Team!

WELCOME NEW EMPLOYEES!		
Sekayi Curtis	Staff Engineer	
Merlyn Mitchell	Administrative Specialist	
Colin Cumberbatch	Construction Project Manager	
Kevin Jackson	Financial Systems Manager	
Bindu Patel	Environmental Water Technician	
CONGRATULATIONS RETIREES!		
Mike Loggins	Water/Sewer Superintendent II	
Christopher Martin	Water System Superintendent I	

WINTER 2023

6th Annual Fulton County Model Water Tower Competition

By: Amy Warnock



On November 3rd, 2022 students from Amana Academy and Taylor Road Middle School participated in the annual Model Water Tower Competition. For 8 weeks, the students worked in teams at their schools to design and build functional model water towers. On competition day the students brought their towers to be judged by water professionals on various criteria, including structural efficiency, hydraulic efficiency, cost effectiveness, and artistic design. Each team also had an interview with 3 judges who asked questions about their design process and their tower's performance. The competition was held at the Tom Lowe Atlanta-Fulton County Water Treatment Plant, which offered the opportunity for students to tour the facility with a licensed water treatment operator and learn more about some of the careers available in the water industry.

This event would not be possible without the support of our partner schools and the many volunteers from the Department of Public Works, Veolia, and other organizations that help the competition run smoothly. This year for the first time, the first and second place winners from Fulton County's competition will be invited to participate in a state-wide Model Water Tower Competition which will be held on April 26th, 2023 at the Water Tower in Gwinnett County.. Those two teams are Team Volcano Explosion and Team Movie Time, both from Amana Academy.





PUBLIC WORKS BY THE NUMBERS

OCTOBER - DECEMBER 2022

WATER RESOURCES	26.58 MGD	TOTAL POTABLE WATER DISTRIBUTED (AVERAGE DAY)
	10.3%	NON-REVENUE WATER (ANNUALIZED)
	19	SMALL METERS REPLACED
	42.91 MGD	TOTAL WASTEWATER TREATED (AVERAGE DAY
	1.97 ACRES	SEWER EASEMENT CLEARED
	34.24 _{MG}	REUSE WATER PROVIDED (JCEC)
	15.1 мс	REUSE WATER PROVIDED (LITTLE RIVER)
	278	WATER AND SEWER SERVICE APPLICATIONS PROCESSED
	0	SEWER OVERFLOWS >10,000 GALLONS (MAJOR SPILL)
	7	SEWER OVERFLOWS <10,000 GALLONS (MINOR SPILL)
	5,635	PEOPLE REACHED BY PEO STAFF
AIRPORT SERVICES	12.27%	INCREASE IN AIRCRAFT OPERATIONS FROM 2021
	19,791	FLIGHT OPERATIONS IN 2022 4TH QUARTER
FID TRANSPORTA TION OPERATIONS	247	FACILITY SIGNS FABRICATED
	11 TONS	LITTER PICKED UP
DEVELOPMENT PERMITS	34	UTILITY PLANS APPROVED
	14	UTILITY PROJECTS UNDER CONSTRUCTION
	6	UTILITY PROJECTS COMPLETED/ACCEPTED

Emerging Leadership Professionals Explore Camp Creek Water Reclamation Facility

By: Sabrina Attimy



Friday, December 16th, the Greater South Fulton Chamber of Commerce brought the newest cohort of Leadership South Fulton professionals for a tour of the Camp Creek Water Reclamation Facility. The group was comprised of local civic, government, and business leaders who live in, represent, or serve in the South Fulton area. The foundation of the program is to offer leaders the opportunity to cultivate and enhance leadership skills, increase community awareness, network and build relationships with other leaders in the County, and assess and resolve civic issues. The goal of this tour was to provide insight about the facility to business professionals and to stress the importance of water quality in the County.

The tour gave leadership professionals the opportunity to get a behind-the-scenes experience that allowed them to see, firsthand, the critical work being done and gain an understanding of the inner workings of the wastewater plant. With this knowledge, emerging leaders can develop a mutual understanding of critical issues facing the region and be part of the solution. A total of 17 adults toured the various stages of the plant, asked plenty of thought-provoking questions, and gained a deeper understanding of the importance of water quality. We are so excited to see how the leaders apply the knowledge they gained to serve South Fulton residents. To organize a tour of one of Fulton County's or wastewater treatment facilities for please water vour group, contact Sabrina **Attimy** Sabrina. Attimy@fultoncountyga.gov.

Commercial Pretreatment Program Gets an Overhaul

By: Poursha Bell

Public Works is seeking to modernize its Industrial and Commercial Pretreatment compliance software. The current legacy solution (XC2 FOG) is out of date and does not fall within the Department's preferred standards. The new solution *SwiftComply Pretreatment/FOG*, the next generation of XC2, allows for efficient data processing, streamlined correspondence functionality for clear communication with our customers and stakeholders, and will have reliable features for compliance reporting that are acceptable to the State of Georgia Environmental Protection Division.



Leveraging *SwiftComply*'s latest technology to manage the compliance programs will save time, prioritize scarce resources, and ultimately increase compliance. Water customers (Industrial Users, Food Services Establishments), Service Providers (Liquid Haulers) and the County's staff will all experience a modern and business friendly program. Online registration and participation are mandatory for all customers who wish to obtain and/or maintain a permit. The new portal, which will be accessible 24-hours-a-day, will also allow customers to track their application, submit payments and necessary documents, correspond with the Commercial Pretreatment Division. The Commercial Pretreatment team will begin its transition to the secure, web-based portal in late February/early March timeframe.

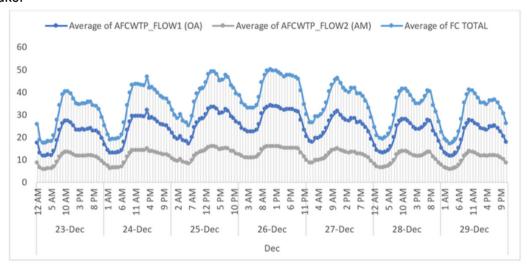
Consumption Behavior in Water Distribution

By: Anna Skipper

Fulton County, like all water and sewer authorities, has a system it uses to track what is going on with its water system. Those systems, supervisory control and data acquisition (SCADA) systems, are crucial for operators to respond in real time to user water demands and malfunctions out in the system or at the plant. But it's also fun to go back and look at the data after the fact to see what it shows us about our system and how people use it.

We noticed during the Christmas holiday that our water usage was unusually high. Looking back at past years, the typical water usage on Christmas day is around 20 to 22 million gallons per day (MGD), which is lower than the December monthly average which varies between 23 and 25 MGD. This year, the flow on Christmas day was 38.76 MGD and much higher than the monthly average of 30 MGD. Not only was the flow on Christmas Day itself unusually high, the entire weekend surrounding was elevated also.

The graph below shows the flow coming from the Atlanta Fulton County Tom Lowe Treatment Plant (AFCWTP) down each of our main transmissions lines: Old Alabama (OA) and Autry Mill (AM). The total is also shown as the lighted blue line. We can see that these higher flows aren't just associated with increased daytime activity, which is what we might expect if this increase was driven by people being home over the holidays and cooking more; the nighttime flows also increased. It's unlikely people are cooking full meals or taking a lot of showers at 3 AM; it's more likely that there are leaks.



This Christmas we had a strong storm system blow in – a bomb cyclone. A bomb cyclone is kind of like a hurricane, except it doesn't occur in the tropics region close to the equator but rather in the mid-latitudes. This storm moved in on December 23, with the temperature getting down to 11°F. It continued to get colder, reaching a low of 7°F on Christmas Eve. This type of unusually cold weather causes problems for water pipes – the water freezes, expanding in the pipes, causing them to burst. When the temperatures increase again, that block of ice turns back into water, which now is not contained by the pipe and is free to flow out. Over the Christmas weekend, we received 155 service calls, only 2 of which were found to be the result of actual Fulton County main breaks. The rest of these leaks were likely from service lines and in people's homes, and given the data, it looks like a lot of water flowed out of these lines. As the January data comes in, we will look to see that these flows return back to their pre-storm averages, assuring ourselves we have found and repaired any leaks that occurred during this winter weather event.

Fulton County Honors the 2023 Art Calendar Winners

By: Kelli L. Edwards



Fulton County would like to recognize all students who participated in the 2023 Art Calendar Contest. Held annually, the Art Calendar contest highlights impressive original works of art from K-12 students in Fulton County, that promote awareness of our vital and limited water resources. Of the 172 bodies of work, 22 were selected to be featured in this year's calendar themed, "Water Connects Us".

Public Works Director David Clark stated, "The amount of talent that all the winners have, show how water is important to us. It is impressive, and I am glad to be a part of this." After the art calendar breakfast reception, student artists were honored by the Fulton County Board of Commissioners during their December 7th meeting. This year's cover winner is Sage Mae Lima-Jefferies, an 11th grade student from the Creative Minds Homeschool. Lima-Jefferies, stated "We all need water, from the fish in the sea to us [living on the Earth]." Her artwork titled, *Water Makes the World Go 'Round*, while not only visually stunning, speaks to the theme and our interconnectedness to natural bodies of water across the globe. The theme of next year's Art Calendar Contest will be announced in August 2023. For more information about this contest, please contact Kelli L Edwards at Kelli.Edwards@fultoncountyga.gov.

Calling All Artists! Recycled Art Contest!

By: Sabrina Attimy

The Public Education and Outreach (PEO) team is pleased to announce the 2nd annual Recycled Art Contest! Submissions will be accepted from now until March 1st. This is a contest for K-12 students to creatively highlight litter as an issue, by only using recyclable materials. Why highlight litter? Because when it rains, it doesn't just pour. Stormwater runoff takes all the litter (plastic bags, bottles, fast food wrappers, receipts, etc.) and carries it directly to our drinking water source. This creates a chain reaction that can have negative impacts but is preventable.

Students can be a part of the solution, and win cash and recognition, by participating in this contest. Winners will be notified by March 15th. An awards reception will occur on April 19th. For more information, check out the link below and share it with any youngsters you know! For any questions, please contact Sabrina Attimy at sabrina.attimy@fultoncountyga.gov.



Helping Residents Weather the Cold

By: Amy Warnock



Preparing your home before cold temps arrive can help you save money on energy bills and avoid expensive damages. Join Fulton County Public Works and Fulton County Cooperative Extension for a free webinar to learn how to protect your home's plumbing system and reduce your energy usage.

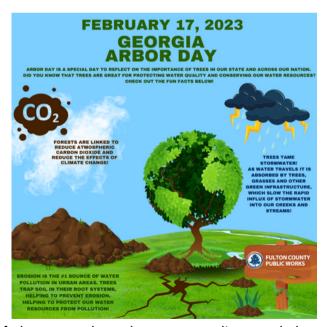
PEO staff brought winterization displays to the South Service Center on December 5th and to the Customer Service Center at Maxwell Road on December 6th, offering visitors tip sheets to help them winterize their homes and free insulated faucet covers to get them started. The team also hosted a virtual Winterization Lunch and Learn on December 15th to walk participants through the winterization process, including stopping drafts, insulating pipes, and draining irrigation systems. The program also covered steps to take during a freeze, such as opening cabinets to allow heat to

pipes and running a small stream of water from the faucet to prevent freezing. Lunch and Learn participants received tip sheets and faucet covers in the mail. A week later, metro Atlanta experienced some of the coldest temperatures in years. Seeing the issues that many homeowners in our region had with burst pipes during the freeze illustrated the importance of winterizations. Through the efforts of the PEO team, over one hundred Fulton County residents went into the freezing weather prepared to protect their homes.

Celebrating Trees with Arbor Day 2023

By: Ebony Jones

Georgia celebrates Arbor Day each year on the third Friday of February. This holiday celebrates and encourages the planting, upkeep, and preservation of trees. Scientific research is increasingly adding to the evidence that trees are essential to global environmental health. This Arbor Day, beware of root intrusion, one of the most serious types of damage impacting your sewer drainage system. It happens when roots find their way into a joint in the pipeline, is attracted by readily available moisture, and start to grow into the sewer line. Sewage leaks are unsanitary and can lead to health problems. Repairing the damage caused by the root intrusion can cost thousands of dollars. Solid waste and waste debris, like toilet paper, is caught up in the root ball to further block the line leading to backups and clogs. Avoid costly repair bills by taking a few



precautionary measures when planting trees. Limit the number of plants you place close to sewer lines, and plant larger trees far away from sewer lines, so the roots are not within reach of the pipes. Join PEO on February 16th and February 17th as we celebrate Georgia Arbor Day, by giving away free tree seedlings and supplies. Meet us at the South Fulton Services Center @Stonewall Tell on February 16th and the Customer Service Center @Maxwell Road on February 17th between 10:30 AM – 12:30 PM. All materials are provided, and you can take your seedling home with you! PEO hopes that you and your family take a few minutes to celebrate Arbor Day by taking a walk outdoors to remind yourself of the peaceful, quiet importance of trees in our daily lives. For more information contact pw.customerservice@fultoncountyga.gov.

UPCOMING EVENTS

Valentine Pop-Up Displays

Wednesday, February 8th 10:30 AM - 12:30 PM Customer Service Center @ Maxwell Rd.

Thursday, February 9th
11:00 AM - 1:00 PM
Fulton County Government Center
Contact: Ebony.Jones@fultoncountyga.gov

Georgia Arbor Day Pop-up Displays

Thursday, February 16th 10:30 AM - 12:30 PM South Fulton Service Center @Stonewall Tell

> Friday, February 17th 10:30 AM - 12:30 PM

Customer Service Center @Maxwell Rd.
Contact: Sabrina.Attimy@fultoncountyga.gov

Airport Master Plan Public Meeting

Thursday, February 16th
5:00 PM - 7:00 PM
Aviation Community Cultural Center
3900 Aviation Circle NW, Atlanta GA 30336

Septic System Education Virtual Workshop

Tuesday, February 28th 6:00 PM - 7:00 PM Zoom Webinar

Register: https://forms.gle/nTqdi99gYJL4bURx6
Contact: Kelli.Edwards@fultoncountyga.gov

Splash into Stream Science Atlanta Science Festival

Saturday, March 18th 12:00 PM - 3:00 PM Cascade Springs Nature Preserve

Contact: Kelli.Edwards@fultoncountyga.gov





Fulton County Board of Commissioners

Robb Pitts - Chairman (404) 612-8200

Bridget Thorne - District 1 (404) 612-8213

Bob Ellis - Vice Chairman, District 2 (404) 612-8216

Dana Barrett - District 3 (404) 612-9800

Natalie Hall - District 4 (404) 612-8226

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