



CONNECTIONS

Fulton County Public Works' Quarterly Newsletter



Outreach in the Age of Social Distancing

By: Amy Warnock and Kelli Edwards

These are challenging times for all of us, and in many different ways. For many employees, the work itself has remained much the same, while the challenge has become adapting the way we get the job done in order to keep ourselves and others as safe as possible. For the Public Education and Outreach team, which generally provides direct, face-to-face programming for thousands of Fulton County residents each year, COVID-19 has really thrown a wrench into the works. Since early March, the PEO team has been working hard to adapt messaging and programming to reach our residents using digital methods and to remind them that Public Works is still working for them every single day.

During Drinking Water Week in early May, the PEO team worked with External Affairs to highlight the drinking water treatment process on social media. What better time to remind our customers how critical our drinking water and wastewater infrastructure is? During Public Works Week, we used those same channels to recognize the work of just a few of our Public Works teams that are working every day to provide essential services. The PEO group also recorded several educational videos for our citizens to help discourage the flushing of wipes and to provide other important information for our residents. These videos are being posted on the Fulton County website for residents to access.

In July, the team began diving into the world of virtual programming, including Zoom activities for the Aviation Cultural Center's virtual summer camp, an "Imagine a Day Without Water" conference call discussion with seniors from the Roswell Senior Center, and a septic tank workshop for realtors at Coldwell Banker. In partnership with the Fulton County Board of Health, on Wednesday, July 8th, we hosted our first Septic System Maintenance Workshop series for the realtors of the Coldwell Banker Brokerage - Dunwoody Perimeter Office. Realtors who completed the 2-hour workshop received a certificate of completion, which can be used to earn continuing education (CE) credits, required by the Georgia Real Estate Commission (GRCE). Amy Warnock, Environmental Quality and Education Manager, presented on socially distanced outreach efforts to the Georgia Association of Water Professionals' virtual annual conference on July 16th.

In August, the PEO group will host a home owner's septic tank workshop with the Board of Health, as well as a rain barrel curbside pickup program in partnership with the City of Sandy Springs. Residents must register ahead of time for both workshops. In addition, registrants for the Rain Barrel Workshop must download the installation instructions and watch our new step-by-step instructional video, and then drive in to pick up their barrel and installation kit. We will also be creating virtual school programs and downloadable resources to support our teachers as they head into what will certainly be a very challenging year for our schools. Every day brings something new, and the PEO team will continue to adapt and innovate to find new ways to reach our residents.

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Upcoming Events

August 5th 6pm-7pm
Homeowners Septic Tank Workshop
Zoom Meeting
Contact Kelli Edwards to Register
kelli.edwards@fultoncountyga.gov

August 8th 10am-11am
Rain Barrel Pick-up Event
Lost Corner Preserve
7300 Brandon Mill Rd NW
Sandy Springs, GA 30328

September 20th-26th
Pollution Prevention Week

September 26th 10a-11a
Rain Barrel Pick-up Event
South Fulton Maintenance and Operations Center
7472 Cochran Rd
College Park, GA 30349

Director's Corner

By David E. Clark, P.E., Director



When I last penned this column in April, I truly believed by this time we would be enjoying a somewhat normal summer. Unfortunately, that is not the case and it does not look good for the fall either. As I write this in mid-July, new COVID cases, hospitalizations, and deaths continue to rise. This is causing everyone to struggle in balancing work responsibilities and family needs all while staying safe and healthy.

Fulton County, in particular Public Works, continues to remain committed to be open and accessible to all of our customers and users of the infrastructure we provide. However, that is not to say that it is business as usual. Fulton County also remains committed in providing these services as safely as possible to the customers while protecting the employees.

These measures include ensuring that everyone entering a Fulton County facility is wearing a face covering and has their temperature taken. Social distancing should also be observed, even when wearing face coverings. Although Fulton County is providing a higher level of cleaning and ensuring that PPE and hand sanitizer are available, it is still important and vital that each of us takes responsibility for our own health and wellbeing. This includes frequent hand washing, limit the sharing of equipment and tools, and most importantly, staying home when you or a family member is sick and exhibiting symptoms associated with COVID-19.

Thank you all for your continued commitment in serving the Fulton County community. I remain proud to be a part of this team and how we rise above whatever adversity is thrown our way.

Important Contacts for Employees	
For payroll, leave, or overtime questions:	Cherylyn Griffin 404.612.7444
For direct deposit, credit union, MARTA, or tax questions:	Maxine Wright 404.612.7724
For 457b questions:	Tomekia Mance 404.612.7668
For 401a questions:	Mass Mutual 800.743.5274
For pension (old plan) questions:	Finance Department 404.612.7600
For employee benefits questions:	Finance Department 404.612.7605
For ADA questions:	Nadine Oka 404.612.7390

Public Works By the Numbers April-June 2020

Water Resources	28.14 MGD	Total Potable Water Distributed (average day)
	5.20%	Non-Revenue Water (annualized)
	142	Small Meters Replaced
	52.64 MGD	Total Wastewater Treated (average day)
	132.9 Acres	Sewer Easement Cleared
	17.53 MG	Reuse Water Provided (JCEC)
	17.53 MG	Reuse Water Provided (Little River)
	517	Water and Sewer Service Applications Processed
	3 YTD: 14	Sewer Overflows >10,000 gallons (major spill)
	7 YTD: 19	Sewer Overflows <10,000 gallons (minor spill)
650	People Reached by PEO Staff	
Airport Services	24,696	Aircraft Operations YTD
FID Transportation Operations	15	Utility Permits Processed
	119	Potholes Repaired
	29 Tons	Litter Picked Up
Development Permits	10	Traffic Signals Maintained
	33	Utility Plans Approved
	128	Utility Projects Under Construction
	2	Utility Projects Completed/Accepted

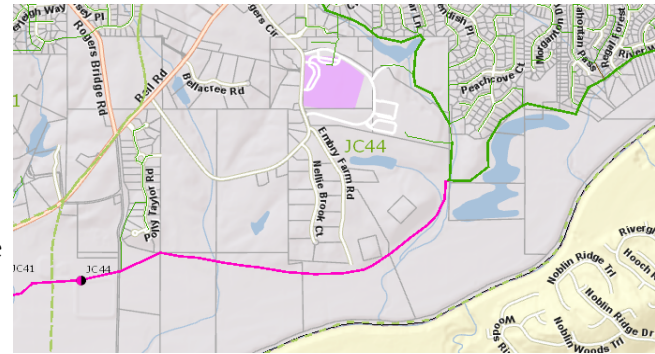
Tech Talk Series: Sewer Sociology and COVID-19

By: Terry Peters, Deputy Director

The COVID-19 pandemic has tremendously affected the behavior of people. That change in behavior can be noted and measured by the flow in our sanitary sewer pipes. Viewing the flow through sewer pipes to describe and understand the nature of people is a discipline known as sewer sociology. Sewer sociology is a fairly new science that was first brought to public sphere by the professionals at ADS Environmental. This happens to be the company we currently contract to monitor our existing sewer flow monitoring program.

Technical services thought it would be interesting to look into how the COVID-19 health emergency has impacted some of the behavior of our customers and how that change in behavior would be reflected in our sanitary sewer flows.

This article, and others to follow, will examine some of the areas currently serviced by Fulton County to see what effects the current public health crises might have on our collective behavior. JC44 will be the first sewer basin examined. It was chosen for the following reasons:



1. The basin is mostly residential and includes two Fulton County School properties. River Trail Middle School and Shakerag Elementary School are two major contributors to the flow passing through the system in this area.
2. The existence of the schools made analyzing the flow in this area particularly interesting especially when comparing flow data to similar periods last year (2019).
3. This basin is not heavily influenced by upstream sewer sheds.

Date	Description	2019		2020		Flow Difference
		Avg Flow (MGD)	Rain (in)	Avg Flow (MGD)	Rain (in)	
March 2nd	First two COVID-19 cases reported in Georgia	0.54	0	0.44	0.61	-0.1
March 12th	First reported death	0.52	0	0.42	0	-0.1
March 15th	Atlanta Mayor Keisha Lance Bottoms declared a state of emergency in the City of Atlanta, and banned public gatherings of more than 250 people	0.53	0.59	0.44	0.09	-0.09
March 24th	Governor Brian Kemp ordered all bars and clubs to close	0.5	0	0.51	0.6	0.01
April 2nd	Governor Brian Kemp issued a state-wide shelter in place order	0.45	0	0.4	0	-0.05
April 8th	Statewide shelter in place is extended through the end of April 2020	0.47	0.34	0.39	0	-0.08
April 24th	Phase 1 reopening gyms, hair salons, bowling alleys and tattoo parlors	0.47	0	0.42	0	-0.05
April 27th	Restaurants and movie theatres can reopen	0.47	0	0.38	0	-0.09

Conclusions:

1. Flow monitors currently in place are good at quantifying flows for particular areas and measuring inter-jurisdictional flows, but additional monitor locations will be required to accurately conduct these types of studies.
2. While flow numbers have been downward trending, not as significantly different as expected by staff.
3. Look to track shifts in peak times along with the timing of the flows especially during peak times.
4. Different and more dramatic changes should be realized in more commercial areas that contain heavy bar and restaurant traffic.

We plan to make a host of additional changes to better look into this topic. Please stay tuned.

Little River Construction Update *By: Tim Mullen*



Construction of the expansion of the Little River Wastewater Reclamation Facility is still underway. The Contractor has installed the membrane system and is ready to start the testing of the membrane. Testing of the membrane system is scheduled to start the first week of August and to be completed in September. When the membranes are installed and tested, the Facility will be able to process the higher flow rates that we are experiencing at this time. The Contractor has completed the construction of the south bio-basin. Testing of the south bio-basin still needs to be performed before acceptance.

The membrane system provider is Suez. They are installing a system similar to the system used at Johns Creek Environmental Campus but using the latest technology. The plant has been designed to be completely automated with an on-site staff of only two individuals. The new plant will be staffed 24 hours a day. The project is now scheduled to be completed in October. The testing of the membrane system needs to show that the system will meet compliance before the Contractor can be released to make the modifications to the existing clarifiers and start demolition of the old facility.

Public Works Hosts Virtual Public Meeting

By: Corlette Banks



On June 25th, Public Works hosted a virtual public meeting for the Big Creek Water Reclamation Facility (WRF) Expansion Project. 32 attendees were present on the virtual platform, which included a mixture of Public Works representatives, elected officials, consultants, community leaders and residents. Public Works Director David Clark, Brown and Caldwell Design Manager Kelly Comstock and Archer-Western Construction Manager Pavel Mayfield each presented aspects of the project before entertaining concerns and questions from the attendees.

The existing Big Creek facility, located in Roswell, serves the largest service area and receives the largest amount of wastewater flow of all the reclamation facilities throughout Fulton County outside of Atlanta. The plant serves the Big Creek watershed including the Cities of Roswell, Alpharetta, portions of Milton, Johns Creek, and Sandy Springs in addition to small areas of Cobb, Forsyth, and DeKalb Counties.

The Big Creek WRF was first constructed in 1971 and expanded several times over the years to the current capacity of 24 million gallons per day (mgd). The project will upgrade and expand the facility from 24 to 32 million gallons per day to meet the projected wastewater treatment demands from future growth. As part of this expansion, the plant will be upgraded to a state-of-the-art membrane bioreactor process (MBR). This advanced technology will produce high quality plant effluent to achieve permit compliance. Other project highlights include a new odor control system, major upgrades of the existing facilities including replacement of aging equipment and enclosure of new treatment processes, and demolition of older and unused facilities. The progressive design-build contract for the project was awarded to the Archer Western–Brown and Caldwell Joint Venture Team and is expected to be Fulton County's largest public works project in the next 50 years.

In order to increase the speed of implementation and reduce the cost of the overall project, the County separated the project into two phases. Phase 2A – Initial Site Preparation, which began in the fall of 2019, includes the excavation and backfill for final grade, demolition of multiple structures around the site, establishment of erosion control improvements, relocation of some existing utilities, and installation of foundation piles for dewatering, UV, and membrane gallery. The team is nearing completion of Phase 2A. Construction for the next phase, Phase 2B, which includes building construction, is expected to begin in the fall, and completed in early 2024.

Fulton County Explores Trenchless Technology

By: Roy Barnes, Deputy Director



A Fulton County sewer project was recently nationally recognized by contractor Ruby Collins and Spiral Wound supplier SEKISUI. This project was unique in that the pipe renewal process was completed without any dig up or having to completely dry the line.



Fulton County has a series of reinforced concrete pipes (RCP) line segments in close proximity to the Chattahoochee River. Recently, segments along Riverside Drive in Roswell, have witnessed infiltration when river overflows occurred. The decision was made to fully renew these segments, however a trenchless technology was necessary due to the busy suburban location. Spiral Wound liners were chosen as the best trenchless pipe lining method for this project.



Two different size pipes were relined. A 60 inch concrete pipe which was the second largest pipe done in the U.S.A, and a 42 inch concrete pipe that was in critical condition. The two diameters required different Spiral Wound methods: SPR™ and SPR™TF. The spiral wound concept stitches together a vinyl strip that forms a pipe within a pipe.



SPR™ was utilized to line the 60” segments. Once the pipe was lined from manhole to manhole, the annular space would be grouted. SPR™TF would be used for the 42” segment. The SPR™TF lining system boasts a traversing machine with hydraulically powered arms.

These arms line the PVC tightly against the host pipe wall, meaning no annular space grouting was required. Over 400 LF of the 42” pipe and over 1,100 LF of 60” pipe were fully restored using the two Spiral Wound methods.

Projects such as these continue to put Fulton County as a leader in sewer rehabilitation projects nationwide. Fulton County intends to use this methodology in other areas in the future.

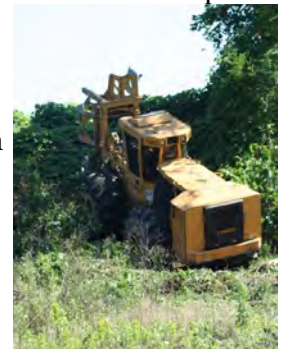
Airport Projects Move Forward Despite Hard-Hitting Pandemic

By: Tim Beggerly, Airport Manager



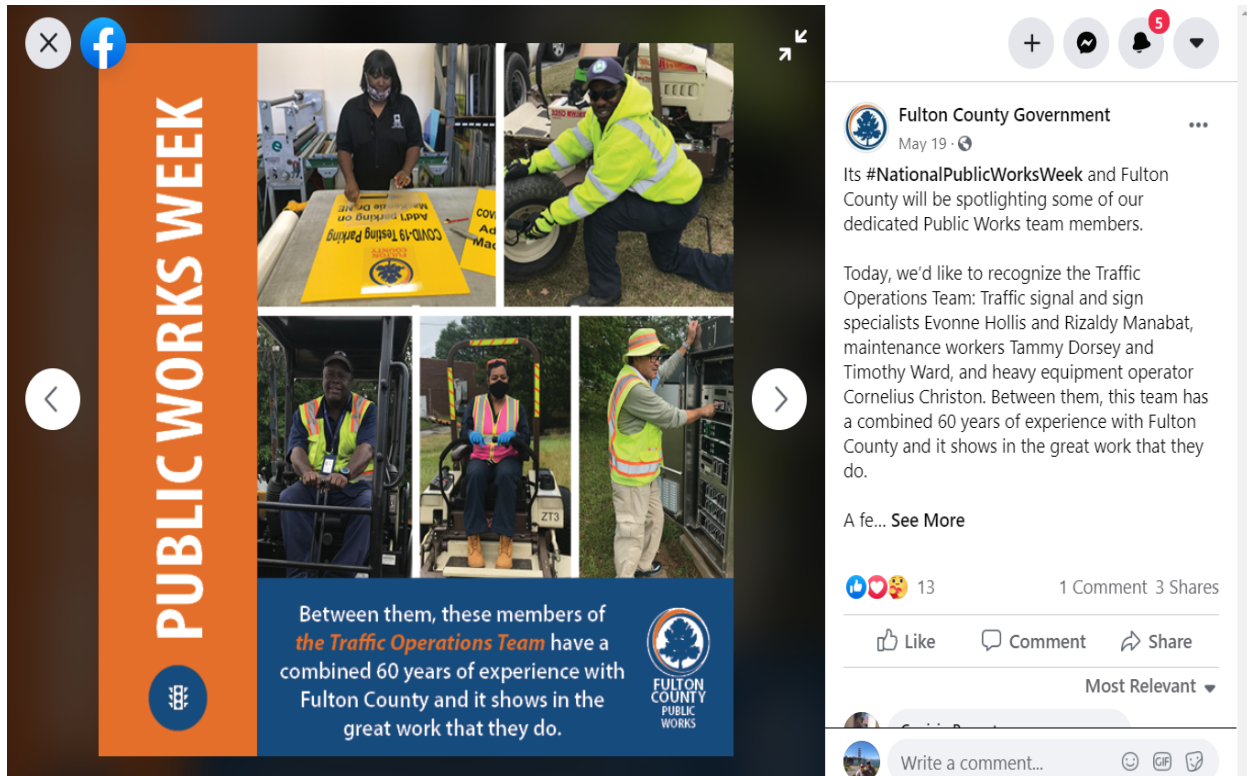
Although the COVID Pandemic has had a negative impact on aviation resulting in a near 90% reduction in flights over the last few months, traffic is slowly beginning to rebound. We're not back to normal, but definitely better than we were. We were however able to continue with our construction projects throughout this time. The conversion of the old runway 9-27 into a taxiway is nearly complete. It is in the final phase of light installation, top dressing and grassing. It is scheduled to be completed by mid-August. The approach light obstruction

removal project is moving quickly and is scheduled to be completed by late-August. This project involves the clearing of trees in a 17 acre area around the approach lights, but will leave vegetation in the environmentally sensitive areas of wetlands and the Chattahoochee River. A contract has been awarded Ed Castro Landscaping to conduct a major landscaping project on and around the airport. The project will upgrade the landscaping along Aviation Circle, MLK, and FIB. We have also started the development of a 20 year Master Plan for the airport. The plan will outline the development of the airport over the next 20 years based on forecasting, aviation trends, community input, and projected technological advances.



PWW 2020: Shining the Light on Public Works' Staff

By: Hannah Penn



This year's national Public Works Week took on a very different look than many of us have become accustomed to. In the past, our week-long celebration involving every division of the Public Works department would bring staff together in a way that we don't normally have the opportunity to collaborate. The committee begins planning the different types of activities at the beginning of the year, and the celebrations are reflective of the hard work that the employees.

When our planning and scheduling was derailed due to COVID-19, the Public Education and Outreach group came up with another way to highlight the important work that our department does for Fulton County citizens by tapping into the social media outlets run by the Office of External Affairs. Public Works is comprised of a diverse list of careers, and some of these employees were spotlighted to include their position, years of service and why they would recommend a job with the Public Works department to anyone looking for a career in public service.

This year's theme "The Rhythm of Public Works" was chosen by the American Public Works Association to encourage members and citizens to consider their communities as a symphony of essential services. Each one has its own unique tempo and the essential services of the community operating in synchronicity are an important part of keeping them in working function.

Thank you to everyone who contributed to the highlights created for Public Works Week 2020 and for all of the employees who contribute daily to the successful operation of the Public Works Department. If you would like to view the features on staff you can visit the Fulton County Government Facebook Page for posts during the week of May 17-23, 2020.

Fulton County Board of Commissioners General Number 404-612-8200
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Vice-Chair Marvin S. Arrington Jr. (District 5) (404-613-0200)
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