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#### Water Committee AGENDA January 11, 2023 8:30a.m.

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Note: This meeting will take place in the Administrative Conference Room located at 140 Stonewall Avenue, Suite 100, Fayetteville, Georgia 30214.

#### Call to Order

- 1. Acceptance of Agenda
- 2. Approval of Minutes from the November 9, 2022 meeting
- 3. Nomination of Chair
- 4. Nomination of Vice-Chair
- 5. SPLOST Mailers
- 6. System Updates
- 7. Director's Report
- 8. Public Comment

Water Committee Minutes November 9, 2022 8:30 A.M.

Committee Members Present: Bryan Keller, Chairman

Vanessa Tigert, Vice-Chair

Steve Rapson, County Administrator

Jeff Hill, Fire Chief

Bill Holland Jim Poff

Committee Non-Voting Members: Dennis Davenport, County Attorney

Michael Diaz, Arcadis

Staff Present: Susan Lee, John Caldwell, Russell Ray, Lindsey Choisnet

#### Call To Order

The meeting was called to order by Chairman Bryan Keller at 8:30 a.m.

#### Acceptance of Agenda

Vanessa Tigert moved to accept the agenda as written. Jim Poff seconded. The motion passed unanimously.

#### 1. Approval of Minutes from the October 12, 2022 meeting

Jeff Hill made the motion and Vanessa Tigert seconded to approve the minutes from the meeting on October 12, 2022. The motion passed unanimously.

#### 2. Approval of the 2023 Water Committee Meeting Schedule

Jeff Hill made the motion and Bill Holland seconded to approve the 2023 meeting schedule. The motion passed unanimously. Dennis Davenport noted the schedule as presented to the Committee reflects the June meeting on the 7<sup>th</sup> which is the first Wednesday in June; Water Committee meetings are to take place on the second Wednesday of the month.

Vanessa Tigert made the motion to amend the approved schedule to Wednesday, June 14. Jeff Hill seconded. The motion passed unanimously.

#### 3. System Updates

Russell Ray presented our quarterly Drought Response report. Last month, parts of Georgia, including Fayette County, reflected as "abnormally dry." As of November 1, a large area of "severe drought" has developed in the Northeastern part of the state and Fayette County conditions now reflect as "moderate." We do expect rainfall this week, but likely not enough to overcome the gradually accumulating deficits that we're seeing.

Currently, Lakes Kedron and Peachtree levels are full. Lakes McIntosh and Horton are both running just less than two feet below full pool.

Vanessa Tigert spoke more specifically on the 2019 vs 2022 elevations at Lake

Horton. In 2019, we applied for a drought response variance from the Georgia Environmental Protection Division (EPD) because Lake Horton was at 775.5 ft. elevation, which is 4.5 ft. below full pool. A Level 1 drought response requires the implementation of a public information campaign. Ideally, we would apply for a variance prior to Lake Horton getting that low because it takes several weeks to send educational materials out to the public.

Compared to the 775.5 ft. elevation at this time of year in 2019, we are currently sitting at an elevation of 778.14 ft. This is due to a slight increase in precipitation but mostly because we are now pumping water from the Flint River into Lake Horton, which has been a major initiative for Ms. Tigert.

Even though Fayette County is sitting well drought-wise, we still need to determine when to start sending out drought educational materials because drought is expected to develop through January 2023. The whole point of EPD's tiered drought response system is to help citizens better understand drought, its impact on water supplies, and the need for water conservation.

Susan Lee advised that we are roughly 40% complete with the Hoseless Sludge Collector installation at both water plants.

The Revised Lead & Copper Rule sampling has been implemented. All samples have been collected for now and we're just waiting on a few more pieces of data to come in.

John Caldwell shared that the Veteran's Parkway waterline extension is getting close to wrapping up and should be in service soon.

#### 4. Director's Report

We are steadily working with Badger Meter to negotiate the AMI contract. Purchasing is heavily involved with our review of the Statement of Work, Master Agreement, and Terms & Conditions.

Ms. Tigert recently attended the Georgia Association of Water Professional's (GAWP) President's Retreat to discuss how GAWP can help utilities. A large focus was how to attract and secure upcoming water professionals. Fayette County has been working with the Board of Education to bring in GED graduates for classes in field services, maintenance, and other trades.

#### 5. Public Comment

Mr. Holland inquired about filling the newly vacant seat on the Water Committee. We are advertising the open position on the Fayette County website and applications are being accepted through Friday, December 2.

#### 6. Adjournment

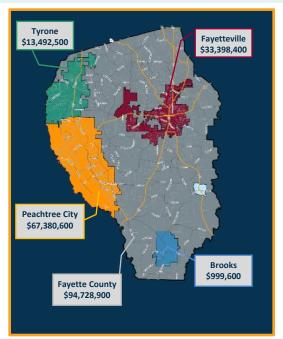
Bryan Keller made the motion and Vanessa Tigert seconded to adjourn the Water Committee meeting on November 9, 2022. The motion passed unanimously.

The November 9, 2022 Water Committee meeting adjourned at 8:5	:58 a.m
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	Bryan D. Keller, Chairman
The foregoing minutes were approved at the regument day of, 2022.	ular Water Committee meeting on the
Lindsey Choisnet, Water Committee Clerk	



## 2023 SPLOST Referendum





#### What is SPLOST?



SPLOST stands for "Special Purpose Local Option Sales Tax" and is a county-wide, 1¢ voterapproved sales tax rates approved for a specific time that local governments can use to fund specific capital projects.

This proposed 2023 SPLOST will cover six years.

March 21, 2023

## How are SPLOST Funds Divided?

Fayette County and the municipalities of Peachtree City, Fayetteville, Tyrone, and Brooks would share the SPLOST proceeds based on population.

Each jurisdiction identified capital improvements that represent a significant investment in the facilities and infrastructure that contribute to the quality of life in our community.

#### **Voting Information**

WHEN: Early Voting will take place from February 27, 2023 to March 17, 2023.

Election Day will be **March 21**, **2023** 

#### **Learn More**

To learn more about SPLOST, including individual project and general information, visit the website below or scan the QR code:

http://fayettecountyga.gov/splost-2023/



### **SCADA System Overview**



# A Supervisory Control And Data Acquisition (SCADA) system is a system of software and hardware elements that are used for:

- Remote monitoring and control of water treatment and distribution processes and field equipment in real time
- Logging, processing, trending, and reporting of historical data
- Alarm handling and notification

#### Some aspects of FCWS SCADA system currently date back to the early 1990's

- Multiple systems have been installed separately over time
- Lack of continuity of operations within and between water treatment plants and the distribution system
- Obsolete hardware and software

## **SCADA System Improvements**



# The goal is to replace and upgrade obsolete hardware and software to achieve a streamlined and fully integrated SCADA system.

- Upgrade SCADA software and hardware
- Upgrade Programmable Logic Controllers (PLC) and Remote Terminal Units (RTU)
- Upgrade Human Machine Interface (HMI)
- Standardize network and infrastructure

### SCADA Improvements - Immediate



**Item 1: SCADA Computer Upgrade** 

Cost: \$60,400 (FY2023)

### **Upgrade:**

 One new SCADA computer at each plant with upgraded HMI, data logging and reporting software used for process control, pumping and remote location monitoring

#### **Benefit:**

- Replaces 8+ year old hardware
- Upgrades Windows 7 OS to Windows 10 OS

## SCADA Improvements – Immediate (cont.)



Item 2: Crosstown WTP Filter Magic SCADA Computer Upgrade

Cost: \$140,000 (FY2023)

### **Upgrade:**

 Two new SCADA computers with HMI, data logging and reporting software used for filter and chemical feed control.

#### **Benefit:**

- Consistent with recent South Fayette WTP Filter Magic system upgrades
- Assure redundancy for data logging



## SCADA Improvements – Immediate (cont.)



Item 3: Crosstown WTP Filter Magic Console Upgrade

Cost: \$185,000 (FY2024)

### **Upgrade:**

New panel-mount industrial computers with upgraded HMI software,

operating on Windows 10 OS

#### **Benefits:**

- Local data logging allows for viewing historical data trends
- Industrial computers' hardware, software, and graphical interface are consistent with South Fayette filter consoles.

## SCADA Capital Improvement Project



# The SCADA system requires continuous upgrades to maintain successful operation and requires future improvements.

	FY2023	FY2024	FY2025	FY2026	FY2027
Immediate Improvements					
Item 1	\$60,400				
Item 2	\$140,000				
Item 3		\$185,000			
Current CIP Funding			\$1.0 Million / 3-Years		
Projected Additional Funding			Pending SCADA Study		
Total Yearly Cost	\$200,400	\$185,000	\$333,000	\$333,000	\$333,000

## SCADA Improvements – Future



# Future Improvements Cost: Pending SCADA Study

- Upgrade Programmable Logic Controller (PLC) modules at water treatment plants
- Replace Remote Telemetry Units (RTU) throughout the distribution system and at pump stations
- Additional chemical inventory monitoring and dosing capabilities
- Upgrade serial radio communication to Ethernet radio or Cellular
- SCADA network infrastructure upgrades

## SCADA Improvements – Future (cont.)



### **Future Improvements**

Task Order 22-11 includes a SCADA Study to evaluate operational considerations, age, security, and technology implementation.

This study has identified the need for immediate and future improvements.

Additional future improvement recommendations will be provided by Arcadis in the technical memorandum in June 2023.

# December Freeze 2022

Fayette County Water System

# December 23-26, 2022

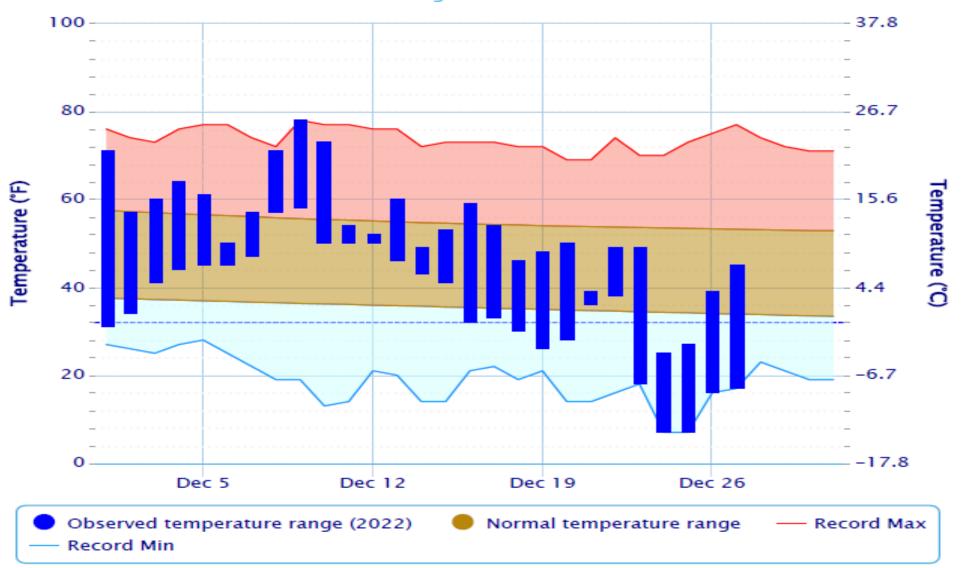
# **Fayette County experienced**

- Record low temperatures
  - > Increased demand
  - > Customer leaks
  - > Fire and EMS support for surrounding Counties

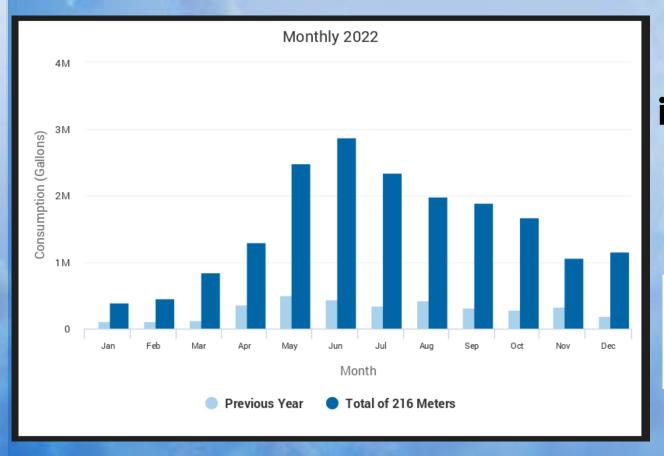




Period of Record - 1994-09-01 to 2022-12-27. Normals period: 1991-2020. Click and drag to zoom chart.



# Monthly Consumption 2021 vs 2022

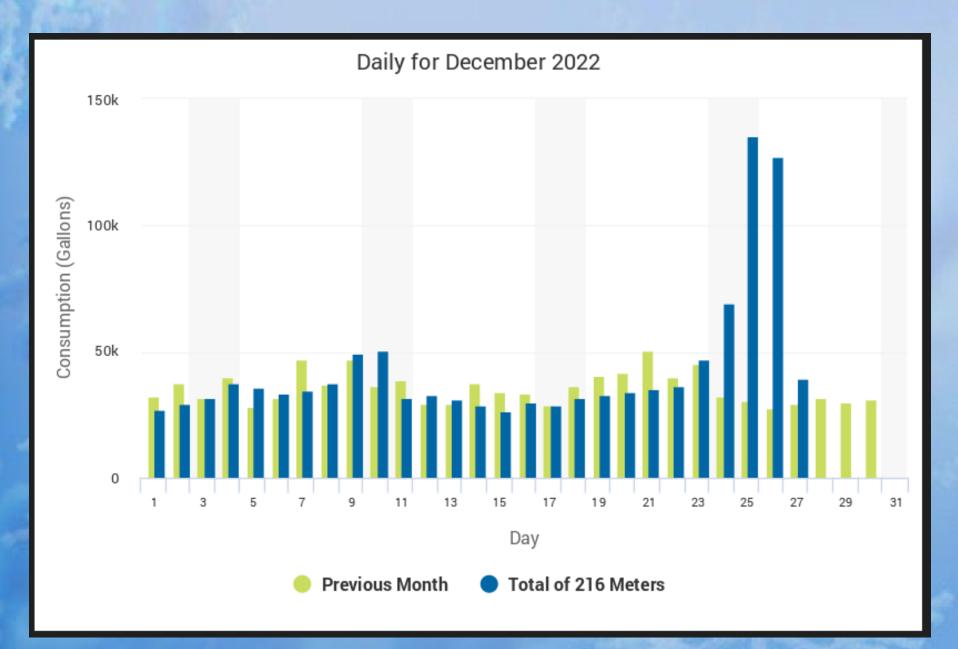


# December 2022 increase in usage +975,806 gallons

## > 520% more flow

December 2022	1,163,597 gallons
December 2021	187,791 gallons

# **Daily Consumption**



# Holiday Comparison Plant Production and Demand

Date	Crosstown Production	Crosstown Demand	South Fayette Production	South Fayette Demand	Total Production	Total Demand
11/24/2022	6,455,000	5,144,000	3,491,000	3,612,000	9,946,000	8,756,000
11/25/2022	5,203,000	4,966,000	3,184,000	2,280,000	8,387,000	7,246,000
11/26/2022	4,979,000	4,545,000	3,049,000	3,310,000	8,028,000	7,855,000
11/27/2022	5,021,000	4,665,000	3,047,000	3,136,000	8,068,000	7,801,000
12/23/2022	6,212,000	5,516,000	3,041,000	3,191,000	9,253,000	8,707,000
12/24/2022	5,889,000	5,301,000	4,844,000	4,805,000	10,733,000	10,106,000
12/25/2022	5,987,000	6,229,000	4,358,000	4,348,000	10,345,000	10,577,000
12/26/2022	6,578,000	6,810,000	5,956,000	5,771,000	12,534,000	12,581,000

# **CUSTOMER LEAKS REPORTED**

**DECEMBER 23-26, 2022** 

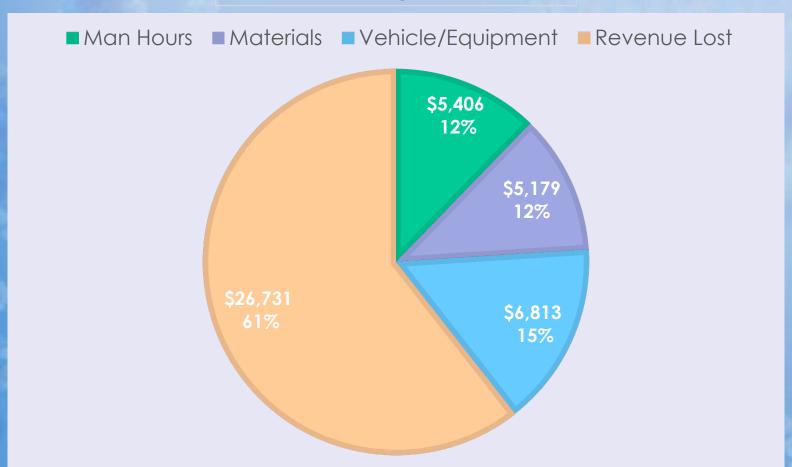
**DECEMBER 23-26, 2021** 

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# Extreme Condition Damages

Total Damages: \$44,129



# TOP 15 CUSTOMERS NOVEMBER 2022



CUSTOMER#	CUSTOMER	SERVICE	TOTAL	TOTAL	
COSTONIER#	NAME.	LOCATION	USAGE	REVENUE	
10836	CITY OF FAYETTEVILLE	WHOLESALE	11,610,701	\$31,200.57	
552	PIEDMONT HEALTHCARE	2 SERVICES	2,526,656	\$8,230.40	
128577	HOSHIZAKI	618 S HWY 74	1,944,380	\$6,326.55	
25487	UNIVERSAL ENVIRONMENTAL SERVICES	3 SERVICES	1,670,465	\$5,477.39	
103667	TARGET	209 N PEACHTREE PKW	1,549,280	\$5,027.27	
129317	DDRTC FAYETTE PAVILION III & IV LLC	HWY 85/HWY 314	1,368,980	\$5,712.63	
29093	CITY OF PEACHTREE CITY		1,360,026	\$4,541.94	
96235	PINEWOOD ATLANTA STUDIOS	5 SERVICES	1,156,091	\$3,955.75	
106915	VR BALMORAL HOLDING LP	450 S PEACHTREE	1,108,530	\$3,626.75	
126515	RETREAT @ PTC APARTMENTS LLC	1600 BARBERRY LN	1,017,480	\$3,856.00	
29362	SUMMIT PROPERTIES	2 SERVICES	979,789	\$3,425.61	
12875	SAINT GOBAIN - MAIL STOP #2	200 SIERRA DR	901,700	\$2,952.92	
117539	YES COMPANIES EXP2 WFC LLC MARNELLE	1512 W HWY 54	790,650	\$2,594.23	
142435	VR KEDRON LIMITED PARTNERSHIP	100 HYACINTH N	738,210	\$2,430.62	
13535	PEACHTREE CITY OWNER LLC	1000 STEVENS ENTRY	717,049	\$2,356.50	
		GRAND TOTAL:	29,439,987	\$91,715.13	

# TOP 15 CUSTOMERS DECEMBER 2022



CUSTOMER#	CUSTOMER	SERVICE	TOTAL	TOTAL
CUSTOMEK#	NAME	LOCATION	USAGE	REVENUE
10836	CITY OF FAYETTEVILLE	WHOLESALE	10,466,582	\$28,145.77
552	PIEDMONT HEALTHCARE	2 SERVICES	2,316,806	\$7,584.60
12877	HOSHIZAKI AMERICA	618 S HWY 74	1,992,160	\$6,480.88
129317	DDRTC FAYETTE PAVILION III & IV LLC	HWY 85/HWY 314	1,370,214	\$5,256.02
25487	UNIVERSAL ENVIRONMENTAL SERVICES	3 SERVICES	1,260,681	\$4,153.79
29362	SUMMIT PROPERTIES	MERRICK/MCDUFF	1,142,140	\$3,935.53
96235	PINEWOOD ATLANTA STUIDOS	5 SERVICES	1,058,957	\$3,639.70
106915	VR BALMORAL HOLDING LP	450 S PEACHTREE PKW	1,053,370	\$3,448.59
126515	RETREAT AT PEACHTREE CITY APARTMENTS, LLC	1600 BARBERRY LN	995,590	\$3,421.43
135354	PEACHTREE CITY OWNER LLC	1000 STEVENS ENTRY	772,626	\$2,536.01
129264	CCC-PWF LLC	5 SERVICES	752,776	\$2,546.95
117539	YES COMPANIES EXP2 WFC LLC MARNELLE	1512 W HWY 54	736,100	\$2,418.03
12875	SAINT-GOBAIN, MIAL STOP #2	200 SIERRA DR	704,900	\$2,317.26
13987	ABERDEEN WOODS CONFERENCE CENTER	201 ABERDEEN PKWY	697,760	\$2,299.97
135355	BRAELINN APARTMENTS OWNER LLC	100 PEACHTREE STATION CIR	642,880	\$2,122.70
		GRAND TOTAL:	25,963,542	\$80,307.23