### Certification

Water systems serving 10,000 or more must use: Distribution Method I	1					
Water systems serving 500 - 9,999 must use:						
Distribution Method I OR						
Distribution Method II, III, and IV						
Water system serving less than 500 people must use:						
Distribution Method I OR						
Distribution Method II, III, and IV OR						
Distribution Method III and IV	OFFICE USE ONLY					
Public Water Supply name(s):	7-digit Public Water Supply ID #(s):					
COLUMBUS LIGHTAND WATER	0440003					
Distribution (Methods used to distribute CCR to o	ur customers)					
6 I. CCR directly delivered using one or more method						
<ul> <li>□ *Provided direct Web address to customer</li> <li>□ Hand delivered</li> </ul>	*Add direct Web address (URL) here:					
Mail paper copy	Example: "The current CCR is available at www.waterworld.ora/ccriviay2023/0830001.pdf. call (000) 000-0000 for paper copy".					
□ Email						
□ II. Published the complete CCR in the local newspaper.	Date(s) published:					
□ III. Inform customers the CCR will not be mailed but is available upon request.	Date(s) notified:					
List method(s) used (examples - newspaper, water bills, newsletter, etc.).	Location distributed:					
□ IV. Post the complete CCR continuously at the	Date:					
local water office.  — "Good Faith Effort" in other public buildings with the water system service area (i.e. City Hall, Public Library, etc.)	Locations posted:					
Certification						
This Community public water system confirms it has distributed and the appropriate notices of availability have been given and consistent with the compliance monitoring data previously subn Public Water Supply and the requirements of the CCR rule.	that the information contained in its CCR is correct and					
Name: Mitchell L. Brown	Title: Date: LEON WATER OPERTOR 23 MAY 2023					
Submittal						
Email the following required items to water reports@msdh.ms.go 1. CCR (Water Quality Report) 2. Certifica	regardless of distribution methods used.  tion 3. Proof of delivery method(s)					



# Water Quality

Data Table & Test Results

Calendar Year 2022

### WHERE DO WE GET OUR WATER?

Our underground water is pumped from eight wells drawing from the massive sand of the lower Tuscaloosa Aquifer.

### SOURCE WATER PROTECTION

The source water assessment has been completed for our public water system to identify potential sources of contamination and determine the overall susceptibility of the drinking water supply. Susceptibility assessment has been completed and all wells have ranked moderate by the MDEQ for vulnerability to contamination.

### **CONTACT US**

As a valued customer, we want you to be informed about your water utility. If you have any questions, please contact Customer Service with Columbus Light & Water at 662-328-7192, Monday through Friday from 8:00 a.m. to 4:30 p.m.

### WATER QUALITY

All sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. These substances can be microbes, inorganic or organic chemical and radioactive substances. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

### **TESTING**

The Columbus Light & Water Department routinely monitors for constituents in your drinking water according to Federal and Mississippi state laws. This table shows the results of our monitoring for the period of January 1st to December 31st, 2022. In cases where monitoring wasn't required in 2022, the table reflects the most recent results. As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and state requirements. We have learned through our monitoring and testing that some constituents have

been detected, however the EPA has determined that your water is safe at these levels.

### **Additional Information for Lead**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Columbus Light & Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead. The Mississippi State Department of Health Public Health Laboratory offers lead testing for \$10 per sample. Please contact 601-576-7582 if you wish to have your water tested.

### **Additional Information for Fluoridation**

To comply with the "Regulation Governing Fluoridation of Community Water Supplies", COLUMBUS LIGHT & WATER is required to report certain results pertaining to fluoridation of our water system. The number of months in the previous calendar year in which average fluoride sample results were within the optimal range of 0.6-1.2 parts per million (ppm) was 11. The percentage of fluoride samples collected in the previous calendar year that was within the optimal range of 0.6-1.2 ppm was 86%. The number of months samples were collected and analyzed in the previous calendar year was 11.

Note: This system adds fluoride to your drinking water to help prevent and reduce cavities and improve overall oral health. Supply-chain issues have limited or prevented this water system's ability to obtain fluoride on a regular basis. The data presented above only reflects the months when this water system added fluoride to your drinking water:



## Water Quality

Data Table & Test Results Calendar Year 2022 continued

### **EXPLANATION OF REASONS FOR MONITORING UNREGULATED CONTAMINANTS**

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminants monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

### SPECIAL POPULATIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate ways to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline: 1-800-426-4791.

CONTAMINATE	VIOLATION Y/N	DATE COLLECTED	LEVEL DETECTED	RANGE	MCL	LIKELY SOURCE OF CONTAMINATION
DISINFECTION BYPRODUCT	S					
Chlorine	N	2022	2.0 RAA 2.00 mg/L	1.80 - 2.20 mg/L	4.0 mg/L	Water additive used to control microbes
Total Haloacetic Acids (HAA5)	N	2022	2.41 ppb		60 ppb	Byproduct of drinking water disinfection
INORGANIC CHEMICALS						
Barium	Ν	2022	0.0138 ppm	0.0078 - 0.0138 ppm	2 ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	N	2022	0.801 ppm	0.0689 - 0.801 ppm	4 ppm	Water additive which promote strong teeth; erosion of natural deposits; discharge from fertilizer & aluminum factories
Lead	Ν	2021	1 ppm		15 ppm	Corrosion of household plumbing systems; erosion of natural deposits
Sodium	Ν	2022	2.69 ppm	1.93 - 2.60 ppm	120 ppm	Naturally occuring runoff; erosion from natural deposits
RADIOACTIVE CONTAMINA	NTS					
Combined Radium	N	2019	2.32 pCi		5 pCi/L	Erosion from natural deposits
UNREGULATED CONTAMINA	ANTS					
HAA5	N	2019	0.78 ppb	0.31 - 0.78 ppb	None	Byproduct of drinking water disinfection
HAA6Br	N	2019	0.53 ppb	0 - 0.53 ppb	None	Byproduct of drinking water disinfection
HAA9	N	2019	1.31 ppb	0.31 – 1.31 ppb	None	Byproduct of drinking water disinfection
Manganese	N	2019	0.57 ppb	0.42 – 0.57 ppb	None	Naturally occurring element

MCL = maximum containment level | ppm = parts per million

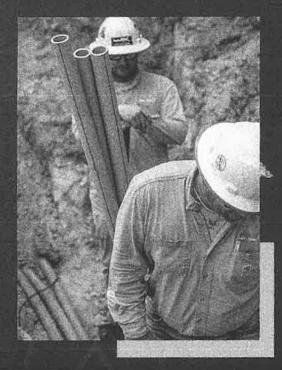
ppb = parts per billion | mg/L = milligrams per liter | RAA = Running Annual Average | pCi/L = picocuries per liter



Columbus Light & Water P.O. Box 949 Columbus, MS 39703 PRESORT STD U.S. POSTAGE PAID Columbus, MS Permit#200

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ELECTRONIC HOSPITAL 228 CHERRYWOOD DR COLUMBUS MS 39702-7921



## High-Speed Fiber Installation

Columbus Light & Water (CL&W) has commenced the installation of a high-speed fiber-based grid network for connectivity of its substations and buildings to improve reliability and communication of utility control devices.

"We are going to the next generation of fiber," said Marc Rushing, Electric Manager, at Columbus Light & Water. "This is an advanced fiber network that is replacing our 20-year-old fiber and radio system. It will allow us to remotely monitor and control electric system controls and switches, and wastewater system lift stations through high-speed fiber optic cable. This gives us a huge advantage to respond quicker to control levels and alarms because of lightning-fast communications. The bottom line is — it will improve

the reliability of services to our customers."

CL&W has teamed up with FiberRise to build and install the new fiber-based grid network.

"We are excited to be working with FiberRise," said Dr. Angela Verdell, General Manager of Columbus Light & Water. "Fiber optics telecommunication is a major step forward to not only upgrade our utility services, but it also helps us to explore the opportunities for developing systems for greater connectivity with our community in the future."

The cost of the fiber installation project is \$1.4 million with an expected completion date of July 2023.



## Mass Connect Disconnect (MCDC) Process

At Columbus Light & Water
(CL&W), we have invested in
advanced metering infrastructure
(AMI), also referred to as smart
meters, to improve the quality and
efficiency of the electric system
that serve our customers. Our
advanced meters have allowed us to improve reliability by
pinpointing and responding to outages more effectively.
They also have built-in technology to remotely connect
and disconnect meters as needed.

Mass Connect/Disconnect (MCDC) is a new process we recently implemented to automatically turn electric meters on or off remotely without deploying a service call. The MCDC process only applies to CL&W electric customers (residential and business) with AMI meters who are scheduled for: a) disconnection of services for non-payment and b) reconnection of services after full payment and a \$20 reconnect fee is received.

"We engaged in careful design and planning prior to implementing the MCDC process for remote connect and disconnection of services that ultimately impacts our customers," said Gloria Howard, Customer Service Supervisor at Columbus Light & Water. "Two key factors we address were to make sure: 1) the MCDC process would automatically reconnect services for customer non-pay accounts once paid in full and the service fee is received; and 2) customers would not have excessive wait times for restoration of services, especially when requested outside of normal hours of operations." The new process will give customers more control over when services will be reconnected.

Prior to the MCDC process, reconnections were made once a day. The current wait time for reconnection of services by the MCDC process is within 2 hours of



payment. This timeframe allows for unforeseen technical issues that may occur.

CL&W customers have multiple ways to pay their bills including:

- Online at www.columbuslw.com (Pay My Bill)
- Phone (662) 328-7192 (option 3)
- Mobile App (Apple or Google Play App Store)
- Self-payment kiosks
  - » Sprint Mart
  - » Walmart (Woodforest Bank)
  - » CLW downtown office only during hours of operations
- Drive-Thru and Cashier Counter-downtown location during hours of operations

Several CL&W business processes and customers are benefiting from the MCDC process including improved efficiencies, productivity, and customer service.

"A lot of manual work has been reduced or eliminated by the MCDC automation process, which has also significantly decreased the number the number of field service calls for truck roll outs," continued Howard. "As a result, we are able to pass on savings to our customers by reducing the after-hour service reconnect fee from \$50 to \$20 whenever it is done by the MCDC process."

### Looking to the future

With AMI and the MCDC process, CL&W has more expansion possibility of full self-service move-in and move-out connects/disconnects options for its customers.



CONTAMINATE DISINFECTION BYPRODUCT	VIOLATION Y/N S	DATE COLLECTED	LEVEL DETECTED	RANGE	MCL	LIKELY SOURCE OF CONTAMINATION
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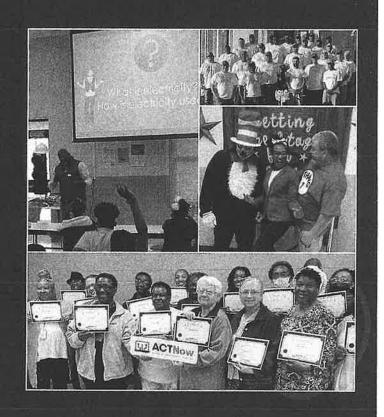
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## Stepping Forward to fill a Need

The CLW Community Outreach Committee, (COC) was formed to promote community engagement through employee volunteerism. The goal of this initiative is to demonstrate goodwill across the city to foster a thriving community. We aim to:

- Promote our values of "The Power of People".
- Demonstrate our commitment to those we serve.
- Foster a culture of positivity within CLW and the greater community.

Through our partnership with the Columbus Municipal School District, we have volunteered time and resources to area elementary schools. Employees have enjoyed engaging students in STEM activities, hosting CLW facility tours and participating in school career days. Outreach efforts have extended to the YMCA Summer Camp, WCBI Weather Road Show, and the ACTNow elderly computer training workshop, funded by a TVA Connected Communities grant. "The COC has been a great way for us to stretch beyond our core competencies to lend a hand for causes outside of our daily functions, said Angela Verdell, General Manager. "Although we are in the service industry, this type of service is priceless. We are making a positive impact that keeps on giving."





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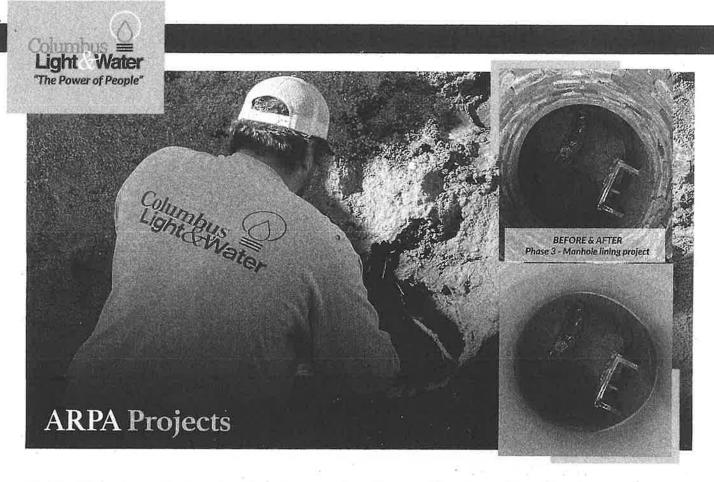
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The City of Columbus received over \$5 million of Coronavirus State and Local Fiscal Recovery Funds (SLFRF) authorized by the American Rescue Plan Act (ARPA) and allocated \$1,013,500 for Columbus Light & Water (CL&W) to use for matching purposes with the State's Mississippi Municipality and County Water Infrastructure (MCWI) Grant Program administered by the MS Department of Environmental Quality. CL&W was awarded a one-to-one matching funding in December of 2022. CL&W allocated \$250,000 of its own annual capital improvements budget as an in-kind contribution to the project for a total budget of \$2.3 million for improvements. All grants' funds are to be expended by the end of 2026.

CL&W identified three projects related to rehabilitation and renovation of the city's oldest areas of sanitary sewer collection system that are critical infrastructure for continuing reliable sewer service for the city and other communities being served.

### Phase 1: 22nd Street South Lift Station

Renovation of the 22nd Street South Lift Station including full restoration of all piping, valves and electrical equipment and controls and the installation of a bypass connection for emergency repairs (Estimated Cost ~ \$667,000)

"This one is a critical project for us," said Ricky Dye, Water Manager at Columbus Light & Water. "Our 22nd Street South Lift Station handles about two-thirds of the city's wastewater. Upgrading our electrical system and adding an emergency bypass is a high priority for contingencies and reliability to service our community."

### Phase 2: 25th Steet North (MLK Lift Station)

Relocation of the existing sewer force main for the 25th Street North (MLK Jr. Drive) Lift Station from Martin Luther King Jr. Drive to a 48" gravity sewer main east of the lift station crossing Lion Hills Golf Course (Estimated Cost ~ \$360,000)

"We want to reduce the wastewater flowing through our current 8" gravity sewer line on MLK," continued Dye. "This will be accomplished by rerouting the force main from the lift station to tie into the existing 48" gravity sewer line that goes directly to 22nd Street South Lift Station."

### Phase 3: Manhole and gravity sewer pipe lining

Collection system repair and/or rehabilitation projects in the form of gravity sewer main point repairs and lining by cured-in-place pipe process as well as the lining of manholes (Estimated Cost ~ \$1,250,000)

"With this project, our goal is to significantly extend the life of our manholes and sewer lines," said Dye. "Some of our older manholes throughout the city are brick lined and by inserting a resin impregnated liner, it will create greater protection from harsh elements like sewer gas and erosion." Lining also reduces the infiltration of ground water into the sewer system, which helps lower treatment costs.

"With ARPA funding and match grant by MCWI, this was too great of an opportunity to pass up," continued Dye. "All in all, these projects impact everyone for the betterment of our community."

### Outage Management System coming soon

Columbus Light & Water (CL&W) is currently testing a new outage management system (OMS) by Survalent to help reduce the duration of outages and its impact on customers through an improved communications and reporting system.

SurvalentONE OMS is a comprehensive outage management solution that includes outage analysis and prediction, call handling, dispatch and crew management, management dashboards, and a customer outage portal. The OMS will help improve operational efficiency for CL&W in the event of an outage.

"We are excited about the OMS because there are a lot of benefits that align with our priority to provide safe, reliable, and affordable service to our customers," said Marc Rushing, Electric Manager at Columbus Light & Water. "When an outage occurs, our customers will be able to log into their portal and see near real-time updates on outage locations including a pinpoint mapping of the service disruption area."

Sharing information helps with the accuracy and validation of the OMS and initiates faster response time by CL&W to restore power. "When customers report outages by phone, text, or via their portal, the OMS will verify loss of power to the meter and display the location in the customer outage portal" continued Rushing. "This will allow our crews to be dispatched significantly faster to restore power more quickly while communicating with customers about our progress."

The OMS generates outage data collection reports that allows CL&W to analyze and improve upon the power restoration process. The new outage management system is scheduled to go live this Summer for CL&W customers.

For customers wanting to receive text notifications of outages affecting their area, please provide updated contact information for cellphone numbers and email addresses at www.columbus-lw.com

