



2023 Annual Water Quality Report

Great River Utility Operating Company
Twelve Oaks Water System
PWS ID MS0360069

ATTENTION: Landlords and Apartment Owners

Please share a copy of this notice with your tenants.
It includes important information about their
drinking water quality.



GREAT RIVER
Utility Operating Company

A CSWR Managed Utility

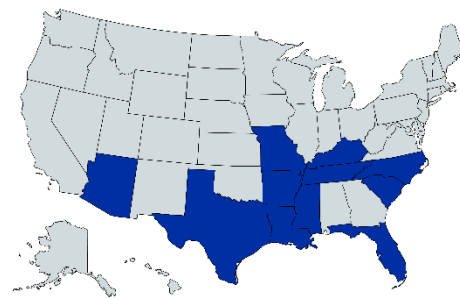


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What is a Consumer Confidence Report (CCR)?

We proudly present our Annual Water Quality Report, also referred to as a CCR. CCRs provide customers with important information regarding the quality of their drinking water. They let customers know what contaminants, if any, were detected in their drinking water, as well as associated potential health effects. We are pleased to report the results of the laboratory testing of your drinking water during the calendar year of 2023. For your information, we have compiled a list of tables showing the testing of your drinking water during 2023.

Our Mission

Central States Water Resources is working to bring safe, reliable, and environmentally responsible water resources to every community in the U.S.

Our Vision

Central States Water Resources (CSWR) is transforming how water utilities work by using technology and innovation to quickly assess and invest in reliable infrastructure that meets or exceeds stringent state and federal safety standards, ensuring all communities across the U.S. have access to safe, clean and reliable water resources while protecting the aquifers, lakes, rivers and streams that are essential to our world.

This report contains important information about the source and quality of your drinking water. If you would like a paper copy of the 2023 Report mailed to your home, please call 1-800-670-4869
Este informe contiene información importante sobre el origen y la calidad de su agua potable. Si desea recibir una copia por escrito del informe anual de la calidad del agua del 2023, llame al número de teléfono 1-800-670-4869

About Your Drinking Water Supply

WHERE YOUR WATER COMES FROM

Water Source: Groundwater

Source Water Assessment:

The Mississippi Department of Environmental Quality has conducted a source water assessment in your area. They have determined that your system is at a lower risk of contamination.

Disinfection Treatment:

The water supplied to you is treated with chlorine to maintain water quality in the distribution system.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

Definition of Terms

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, that a water system must follow.

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk of health. ALGs allow for a margin of safety.

Average (Avg): Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if Possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Definition of Terms

Million fibers per Liter (MFL): A measure of asbestos

Millirems per Year (MREM): A measure of radiation absorbed by the body

Minimum Reporting Limit (MRL): The smallest measured concentration of a substance that can be reliably measured by a given analytical method.

Not Applicable (NA): Sampling was not completed by regulation or was not required.

Not Detected (ND): Not detectable at reporting limit.

Nephelometric Turbidity Units (NTU): Measure of clarity or turbidity of the water.

Picocuries per liter (pCi/L): Measure of the natural rate of disintegration of radioactive contaminants in water.

Parts per billion (ppb): One part substance per billion parts water or microgram per liter ($\mu\text{g/L}$).

Parts per million (ppm): One part substance per million parts water or milligram per liter (mg/L).

Parts per quadrillion (ppq): Parts per quadrillion, or picograms per liter (pg/L)

Parts per trillion (ppt): One part substance per trillion parts water or nanograms per liter (ng/L).

$\text{ppm} \times 1000 = \text{ppb}$

$\text{ppb} \times 1000 = \text{ppt}$

$\text{ppt} \times 1000 = \text{ppq}$

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants That May be Present in Source Water:

Microbes	such as viruses and bacteria may come which may occur through sewage treatment plants, domesticated animals, or wildlife.
Inorganic Chemicals	such as toxic heavy metals and salts, which come from urban stormwater runoff, industrial waste discharges, oil and gas production, mining, or farming.
Pesticides & Herbicides	which may come from a variety of sources such as agricultural or stormwater runoff, and residential uses.
Organic Chemicals	including synthetic or volatile organic human-made compounds, such as dry-cleaning solvents, may occur due to disposal of untreated waste into septic systems or stormwater runoff.
Radioactive Contaminants	which can be naturally occurring or man-made may occur through weathering rock, mining, and runoff.

Special Health Information:

Some people may be more vulnerable to contaminants in drinking water than the general population. Those who are undergoing chemotherapy or living with HIV/AIDs, transplants, children and infants, elderly, and pregnant women can be at particular risk for infections. If you have special health care needs, please consider taking additional precautions with your drinking water and seek advice from a health care provider. For more information visit www.epa.gov/safewater/healthcare/special.html.

The following page will display the results of your water quality

- Central States and our Utility Operating Companies conduct extensive monitoring to determine if your water meets all water quality standards. The detections of our monitoring are reported in the following tables.
- Some unregulated substances are measured, but MCLs have not been established by the government. These contaminants are shown for your information.
- Regulated contaminants not listed in this table, were not found in the treated water supply.



Water Quality Results

2023 Water Quality Test Results							
Disinfectants	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MRDL	MRDLG	Collection Date	Likely Source of Contamination
Chlorine (ppm)	N	1.2	1.0-1.51	4	4	2023	Water additive used to control microbes.
Inorganic Chemicals (IOC)	Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Collection Date	Likely Source of Contamination
Nitrate (ppm)	N	0.572	N/A	10	10	02/22/2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate-Nitrite (ppm)	N	0.572	N/A	10	10	02/22/2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Lead and Copper	Violation Y or N	90th Percentile	Number of Samples Exceeds AL	AL	ALG	Collection Date	Likely Source of Contamination
Lead (ppb)	N	0	0	10	0	2020	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. □
Copper (ppm)	N	0.1	0	10	10	2020	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives. □

Health Language:

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome". Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.

2022 Violations

Violation Type	Explanation & Health Effects	Violation Date	Corrective Action
<u>Chlorine Monitoring, Routine (DBP), Major</u>	Failed to collect monthly bacteriological samples in June 2023	4/1/2023-6/30/2023	Sampling resumed in July 2023 and those showed we are meeting drinking water standards.
<u>Chlorine Monitoring, Routine (DBP), Major</u>	Failed to collect monthly bacteriological samples in December 2023	10/1/2023-12/31/2023	Sampling resumed January 2024 and those showed we are meeting drinking water standards.
<u>E. Coli Monitoring, Routine, Major (RTCR)</u>	Failed to collect monthly bacteriological samples in June 2023	6/1/2023-6/31/2023	Sampling resumed in July 2023 and those showed we are meeting drinking water standards.
<u>E. Coli Monitoring, Routine, Major (RTCR)</u>	Failed to collect monthly bacteriological samples in December 2023	12/1/2023-12/31/2023	Sampling resumed January 2024 and those showed we are meeting drinking water standards.

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, People in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

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. Great River is responsible for providing high quality drinking water but cannot control the variety of plumbing materials. 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.

In compliance with Federal (40 CFR Part 141 Subpart 1) and State Regulation (10 CSR 60-15) CSWR finds it necessary for the health and safety of our customers to adopt lead control standards which ban the use of lead materials in the public drinking water system and private plumbing connected to the public drinking water system.

If you live in an older home or 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>.

Reduce Your Exposure

1. **Flush your home's pipes** by running the tap before drinking the water. Residents should contact their water utility for recommendations about flushing times in their community.
2. **Use Cold water** only for drinking, cooking, and making baby formula. Boiling water does not remove lead.
3. **Clean your aerator** (screen of faucet) regularly to remove sediments, debris, and lead particles that naturally collect over time.
4. **Use a filter** that is certified to remove lead. Regularly replace the filter as it becomes less effective after expiration. Do not run hot water through the filter.
5. **Have a licensed plumber check your plumbing** for lead-based materials

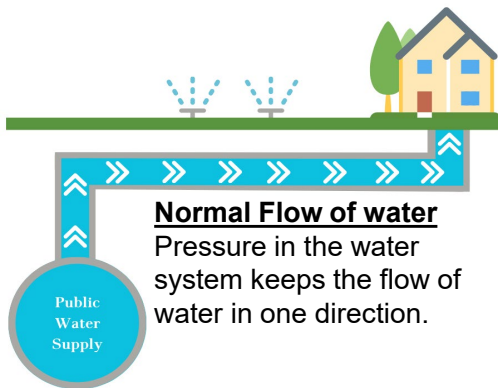


Backflow Prevention

Backflow is the unwanted reversal of flow from a customer to the water supply. This is caused by a loss of pressure in the water supply line or an increase in pressure on the customer side. Common situations where backflow occurs are water main breaks or firefighting events. These events create low pressure in the distribution system. Backpressure can cause backflow when the pressure in a building exceeds the pressure in the water supply line, causing liquid from the customer's line to move into the water supply. Backflow Prevention Devices are designed to restrict the flow of water to one direction.

Cross Connection

Cross-connections are links between a customer and the drinking water supply lines. Cross-Connections may contaminate the drinking water supply if there is a backflow event. Backflow through cross-connections are very serious and have the potential to cause serious health hazards.



Common household items requiring installation of a Backflow Prevention Device

Lawn Irrigation/Sprinkler System, Pool, Hot Tub, Fire Protection Sprinklers and Boilers

If you have any questions about Backflow Prevention or would like to notify CSWR of your Backflow Devices, please call or email: Great River Utility Operating Company at 1-855-801-8440 or support@greatriveruoc.com

How to Participate

Protecting drinking water at its source is an important part of the process to treat and deliver high quality water. It takes a community effort to protect shared resources. This includes utilities, businesses, residents, government and non-profit organizations.

WATER INFORMATION SOURCES:

Central States Water Resources (CSWR)

<https://www.centralstateswaterresources.com/contact-us/>

Mississippi Department of Health/Bureau of Public Water Supply

<https://apps.msdh.ms.gov/DWW/>

United States Environmental Protection Agency (USEPA)

www.epa.gov/safewater

Safe Drinking Water Hotline (800) 426-4791

Centers for Disease Control and Prevention www.cdc.gov

American Water Works Association www.drinktap.org

Water Quality Association www.wqa.org

National Library of Medicine/National Institute of Health

www.nlm.nih.gov/medlineplus/drinkingwater.html

WHAT CAN YOU DO?



Properly dispose of pharmaceuticals, household chemicals, oils and paints.



Clean up heating or fuel tank leaks with cat litter. Sweep material and seal in bag. Check with local facility for disposal.



Clean up after your pets and limit the use of fertilizers and pesticides.



Take part in watershed activities or volunteer outreach programs.