

**2023** Joint Municipal Water  
& Sewer Commission's

# WATER QUALITY REPORT



Public well being is our top priority, and there are measures of water quality assurance that JMWSC takes every day as a regular course of operation in our own system. Although these are standard processes for any water system, they are especially vital to us at JMWSC as we recognize that we are the direct connection between our customers and their drinking water. Our staff employs a variety of important steps on a regular schedule to keep us informed of the quality of water we supply to your tap. This includes collecting water samples for water quality testing, from locations across our system, routine system flushing, and regular tank maintenance.



JMWSC System Number: 3220003  
Pelion System Number: 3210010

**JMWSC** IS COMMITTED TO PROVIDING **EXCEPTIONAL**  
**SERVICE** TO COMMUNITIES THROUGH  
RESPONSIBLE **STEWARDSHIP** OF RESOURCES



# 2023 Water Quality Report

## Joint Municipal Water & Sewer Commission Delivers Quality Water

The Joint Municipal Water & Sewer Commission (JMWSC) is diligently committed to providing the highest quality of drinking water to the residents in our service area. The Environmental Protection Agency and the S.C. Department of Health and Environmental Control have established standards for drinking water. These standards were designed to protect the consumer from bacteria and water borne illnesses. This report reflects on the Commission's commitment and represents a summary of the drinking water quality during the year 2023. Should you have questions concerning this report please call (803) 359-8373.

### Where does my water come from?

The Commission draws water from two connections with the City of West Columbia. Both connection points are supplied by the surface water treatment plant located on Old Cherokee Road, which uses Lake Murray for its water source and has the capacity to produce over twenty-two million gallons per day, of which the Commission has acquired approximately twelve million gallons per day of the total capacity.

### Does my drinking water meet regulations?

The Commission is committed to providing water that not only meets, but exceeds all standards set forth by the S.C. Department of Health & Environmental Control (DHEC) and the Environmental Protection Agency (EPA).

### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 (Centers for Disease Control) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### What's in my 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.

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify

problems and to correct any problems that were found. During the past year JMWSC was required to conduct one Level 1 assessment. One Level 1 assessment was completed. JMWSC was not required to take corrective actions.

### Contaminants that can be present in water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm runoff and residential use;
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban storm water runoff and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- Non-Organic PFAS and PFAS-related chemicals

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791). 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.

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. We 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 REVISED LEAD AND COPPER RULE

better protect children and communities from the risks of lead exposure by better protecting children at schools and child care facilities, getting lead out of our nation's drinking water, and empowering communities through information.

Improvements under the new rule have an effective date of October 2024 and include: Using science-based testing protocols to identify more lead sources in drinking water; establishing a trigger level to jumpstart mitigation earlier and in more communities; mandating more and complete lead service line replacements; for the first time, requiring testing in schools and child care facilities; and requiring water systems to identify and make public the locations of lead service lines.

As JMWSC develops our compliance plans for the new LCR, we want you to know we have been proactive about lead and copper in several ways. We've completed our service line inventory data collection. This inventory includes both the JMWSC side and the customer side of the meter. To date, we have not found any lead service lines in our system. Because of our past test results that are below the EPA's limits, JMWSC remains on a reduced monitoring schedule.

The Environmental Protection Agency's (EPA) Lead and Copper Rule (LCR), first established in 1991, recently underwent its most extensive revision in 30 years to



# REGULATED DETECTIONS

CONTAMINANT	MCLG	MCL	HIGHEST DETECTED LEVEL	VIOLATION	TYPICAL SOURCE	SAMPLE PERIOD
<b>Nitrate</b>	10 mg/L	10	0.020 (DHEC results)	No	Runoff from fertilizer use	2023
<b>Fluoride</b>	4 mg/L	4	0.480 (DHEC results) Range = 0.110-0.800	No	Erosion of natural deposits; water additive which promotes strong teeth	2023
<b>Sodium (ppm) (unregulated)</b>	N/A	N/A	17 Range = 17-17	No	Naturally occurring	2023
<b>Copper</b>	1.3 mg/L	AL-1.3			Corrosion of household plumbing system	
JMWSC			0.367 Range = 0.023-0.367 90th percentile	No		2022
Pelion			0.185 Range = 0.034-0.216 90th percentile 0.155	No		2022
<b>Lead</b>	0	AL-15 ppb			Corrosion of household plumbing system	
JMWSC			0.015 Range 0.00-0.015 90th percentile 3.0	No		2022
Pelion			0.014 Range 0.0-0.014 90th percentile 0.002	No		2022
<b>Haloacetic Acids (HAA5)</b>	N/A	60 ppb			By-products of drinking water disinfection	
JMWSC			LRAA = 20.0 Range = 5.17-24.96	No		2023
Pelion			LRAA = 21.0 Range = 0.00-29.82	No		2023
<b>Total Trihalomethanes (TTHM)</b>	N/A	80 ppb			By-product of disinfection	
JMWSC			LRAA = 24.0 Range = 6.22-28.03	No		2023
Pelion			LRAA = 23.0 Range = 13.65-23.59	No		2023
<b>Chloramines (mg.L)</b>	MRDLG-4	MRDL-4			Water additive used to control microbes	
JMWSC			Range = 0.75-3.66	No		2023
Pelion			Range = 1.1-3.44	No		2023
<b>E. coli</b>	N/A	0			Bacteria present in the system	
JMWSC			0 out of 615	No		2023
Pelion			0 out of 24	No		2023
<b>Total Organic Carbon</b>	N/A	1.0 (35% removal)	43.91% removal Range = 36.8-51.5	No	Naturally present in the environment	2023
<b>Turbidity</b>	<0.3 ntu in 95% of samples/month		0.14	No	Soil runoff	2023
<b>UCMR5 (Ug/L)</b>	N/A	N/A				
HFPO-DA			0.0066	No	PFAS are a group of synthetic chemicals used in a wide range of consumer products and industrial applications including: non-stick cookware, water-repellent clothing, stain resistant fabrics and carpets, cosmetics, firefighting foams, electroplating, and products that resist grease, water, and oil. PFAS are found in the blood of people and animals and in water, air, fish, and soil at locations across the United States and the world.	2023
PFHxA			0.0040	No		2023
PFOS			0.0057	No		2023
PFPeA			0.0043	No		2023

- Action Level (AL): the concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow
- Inorganic Contaminants (IOC's): chemicals that do not arise from living growth, such as metals and minerals
- 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
- Locational Running Annual Average (LRAA): the average of all compliance samples taken over the past 4 quarters at each sampling site
- Maximum Contaminant Level Goal (MCLG): the level of a contaminant in drinking water below which there is no known or expected risk of health

- Maximum Residual Disinfectant Level (MRDL): the highest level of a residual disinfectant that is allowed in drinking water
- Maximum Contaminant Level (MCL): the highest level of a contaminant that is allowed in drinking water (MCL's are set as close to the MCLG's as feasible using the best available treatment technology)
- Nephelometric Turbidity Units (NTU): a measure of the clarity of the water
- Not Applicable (N/A): does not apply
- Not Detected (ND): not detectable at testing limit
- Parts per million (ppm) or milligrams per liter (mg/L): a measure of concentration that corresponds to one minute in two years; a single penny in \$10,000; one second in 12 days; or one ounce in 7,350 gallons of water, etc.

- Parts per billion (ppb) or micrograms per liter (ug/L): a measure of concentration corresponding to one minute in 2,000 years; one penny in \$10,000,000; one second in 32 years; or one ounce in 7,350,000 gallons of water, etc.
- Pico curies per liter (pCi/L): a measure of the radioactivity in water
- Running Annual Average (RAA): an average of the four quarters
- Total Trihalomethanes (TTHM): a group of four organic compounds that may form when natural organic matter reacts with chlorine
- Treatment Technique (TT): a required process intended to reduce the level of a contaminant in drinking water

## THE NEW PFAS CHEMICAL RULE

manufactured chemicals used in millions of products since the 1940's because of their heat, water, and stain resistance.

JMWSC staff started collecting samples in accordance with Environmental Protection Agency Unregulated Contaminant Monitoring Rule 5. The first set of samples were collected in November of 2023 and results are reflected in the data table.

In April 2024, Environmental Protection Agency (EPA) issued a final rule for the National Primary Drinking Water Regulation (NPDWR) setting forth a maximum contaminant level for six per- and polyfluoroalkyl substances (PFAS). The following are the PFAS compounds covered by the rule:

- Perfluorooctanoic acid (PFOA)
- Perfluorooctane sulfonic acid (PFOS)
- Perfluorononanoic acid (PFNA)
- GenX Chemicals: hexafluoropropylene oxide dimer acid (HFPO-DA)
- Perfluorohexane sulfonic acid (PFHxS)
- Perfluorobutane sulfonic acid (PFBS)

Public water systems will have three years to comply with monitoring requirements and five years to take steps to reduce levels of PFAS Chemicals in their drinking water. Joint Municipal Water & Sewer Commission is committed to working to ensure clean, safe drinking water and is evaluating all of its options to comply with all regulations within the time frame set forth by the EPA.

Per- and polyfluoroalkyl substances, PFAS for short, are a group of

Below are the maximum Contaminant Levels (MCLs) and MCL Goals for these chemicals:

PFAS Compound	Final Legally Enforceable MCL	Final MCL Goal
PFOA	4 parts per trillion (ppt)	0
PFOS	4 ppt	0
PFNA, PFHxS, PFBS, GenX chemicals	10 ppt	10 ppt
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	1. Hazard Index (unitless)	1. Hazard Index (unitless)



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## HOW CAN YOU GET INVOLVED?

If you are interested in learning more about our organization or the quality of water, please contact our office to see what opportunities are available. Questions about water quality can be answered by calling the Water Department at (803) 359-8373.

The Commissioners hold regular meetings on the second Wednesday of each month. These meetings are conducted at our offices located at: 2546 Two Notch Road, Lexington, SC, and begin at 5:30pm. The public is welcome to attend.

“There is no greater responsibility we have than delivering drinking water that meets or exceeds regulations to our community, and we are vigilant in protecting the public health of our neighbors and families that we serve. We do this not only because it is our responsibility, but because we also rely on it for our own families and friends.” -JMWSC

# EPA's Hotline: 1-800-426-4791

Important Information About Your Drinking Water - Availability of Monitoring Data for Unregulated Contaminant for JMWSC: Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customer, you have a right to know that this data is available. If you are interested in examining the results, please contact Jay Nicholson at (803) 359-8373 or by mail at PO Box 2555, Lexington, SC 29071.

#### THE CITY OF WEST COLUMBIA SOURCE WATER ASSESSMENT

The City of West Columbia Source Water Assessment Plan is available for your review at <http://www.scdhec.gov/HomeAndEnvironment/Water/SourceWaterProtection/>.  
If you do not have internet access, please contact the City of West Columbia at (803) 957-4596 to arrange to review the plan.

SYSTEM NUMBERS: 3220003 & 3210010

EPA'S Hotline 1-800-426-4791