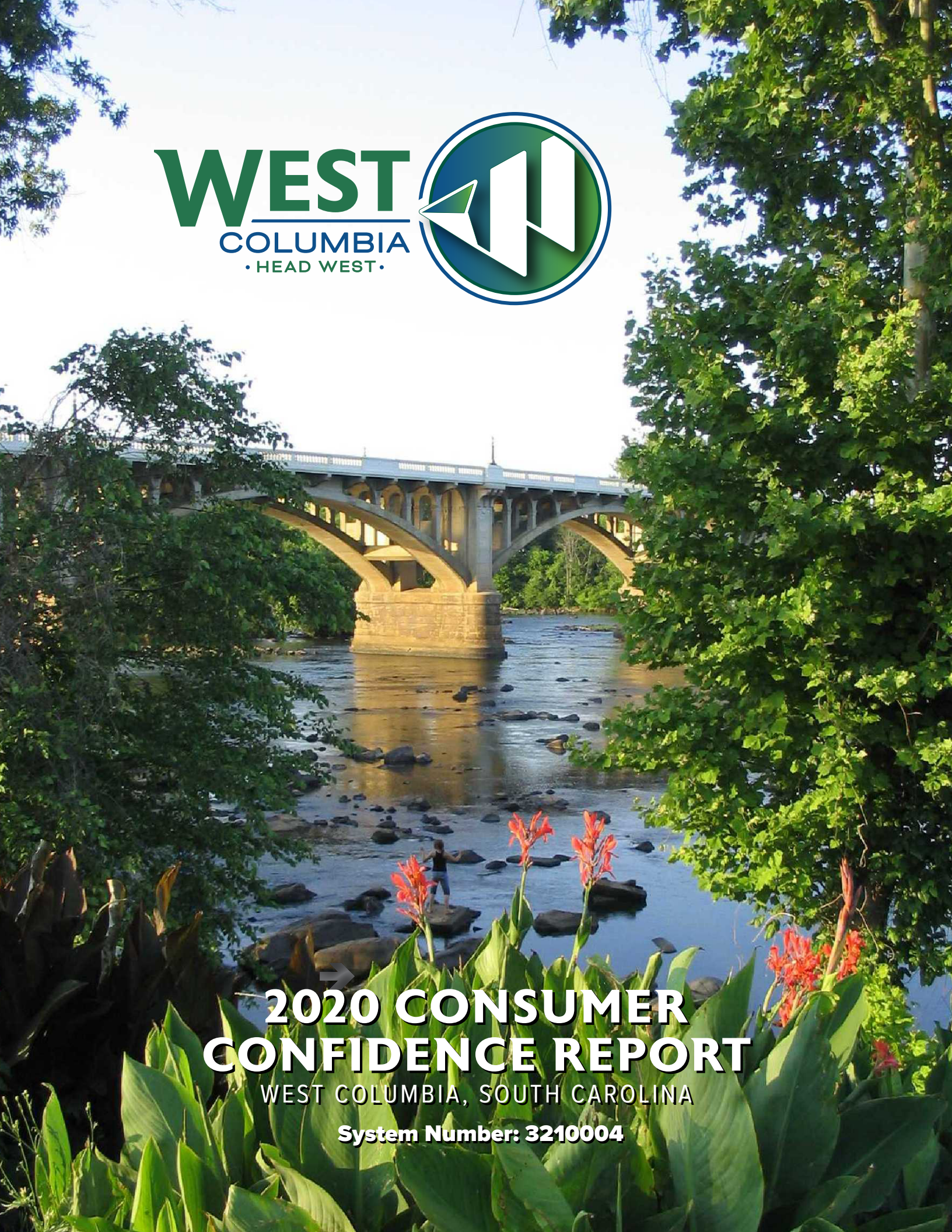


WEST COLUMBIA
• HEAD WEST •

2020 CONSUMER CONFIDENCE REPORT

WEST COLUMBIA, SOUTH CAROLINA

System Number: 3210004

MESSAGE FROM THE MAYOR

Dear Valued Customer,

The City of West Columbia strives to provide superior service while delivering reliable, high-quality drinking water to our customers. In accordance with the Safe Drinking Act, here is the City of West Columbia's 2020 Water Quality Report.

This report provides a snapshot of last year's water quality and how it compares to standards set by regulatory agencies. Our staff is committed to providing safe drinking water and safeguarding the public health of our community.

If you have any questions concerning this report, your water quality, or water service, please contact me at (803) 791-1880.

With kindest regards,

Mayor Temus C. "Tem"Miles, Jr.
City of West Columbia

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

@WestColumbiaSC facebook.com/WestColaSC

DISCOVER MORE AT
WestColumbiaSC.gov

Important Information About
Your Water

IS MY DRINKING WATER SAFE?

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Yes, water produced by the City of West Columbia not only meets, but exceeds all standards set forth by the S.C. Department of Health and 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. 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

WHERE DOES MY WATER COME FROM?

The City owns and operates two (2) water filtering and treatment facilities. The City's Riverside Water Treatment Facility is located at 406 Sunset Boulevard in West Columbia and has the capacity to provide up to 6 million gallons per day (MGD) of drinking water. This plant draws its source water from the Saluda River.

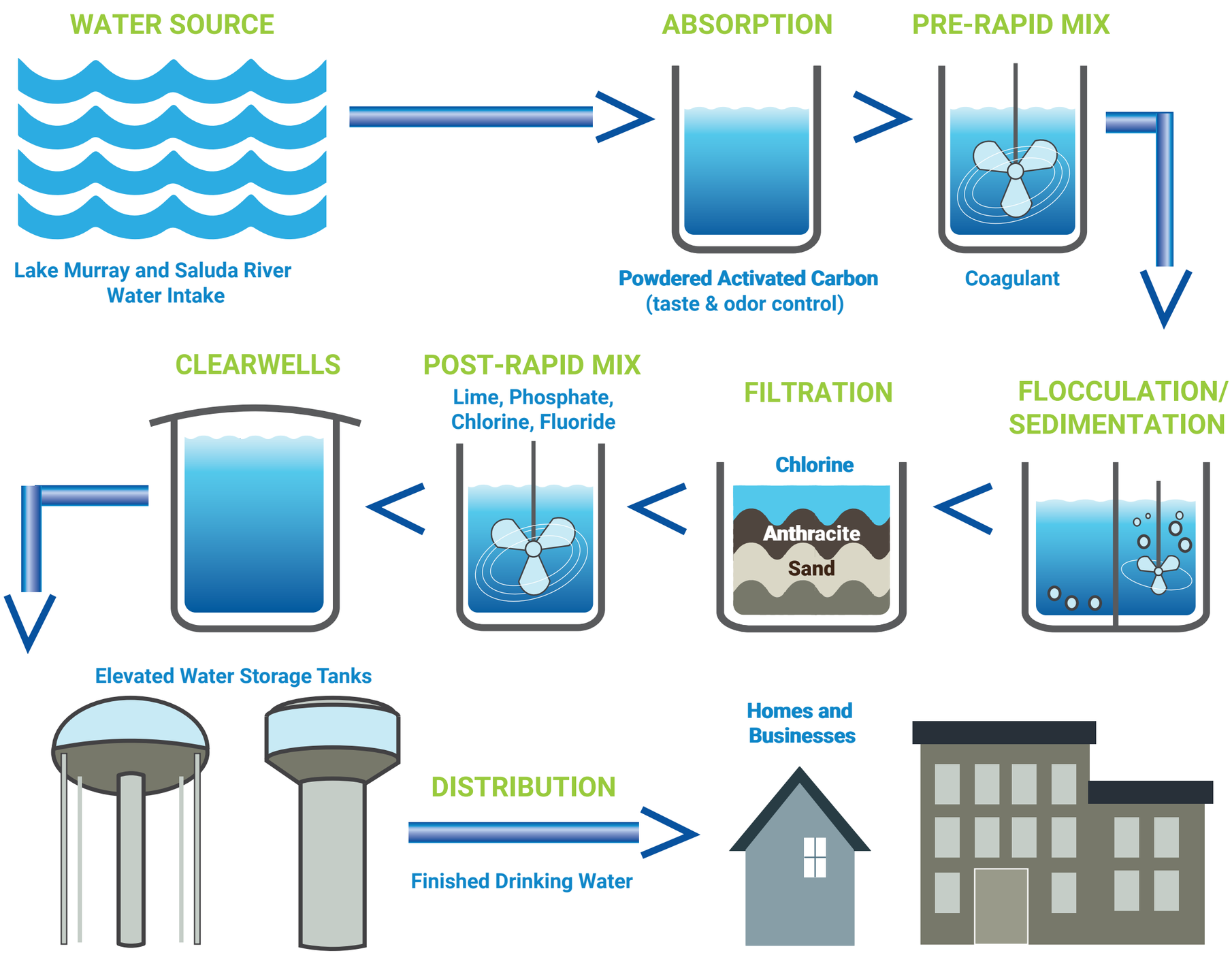
The City's second facility, the Lake Murray Water Treatment Facility, is located on Old Cherokee Road in Lexington and has the capacity to provide up to 22.5 MGD of drinking water. Both Facilities provide drinking water for the residents of West Columbia and other areas of Lexington County through approximately 277 miles of water distribution lines ranging from 2" to 36" diameter in size.

POINT OF INTEREST

To ensure the drinking water quality for the City of West Columbia's customers, tests are conducted every two hours. Annually, we perform approximately seventy-three thousand tests at each water treatment facility.

Andy Zaengle, P.E.,
Director of Engineering and Water Plants
(803) 957-4596

WATER TREATMENT PROCESS



Before arriving at your tap, water is treated at the Lake Murray or Riverside Water Plants to remove sediment, bacteria, and other impurities. The plant provides drinking water that exceeds SCDHEC and US EPA water quality regulatory standards.

WATER SOURCES
Water from Lake Murray and the Saluda River intakes flow through large pipes to our plant.

ABSORPTION
Powdered activated carbon (PAC) is added to adsorb natural organic matter to control taste and smell.

PRE-RAPID MIXING
Water is rapidly mixed with Polyaluminum Chloride (PALI), a coagulant that helps the impurities stick together to form bigger particles called floc.

FLOCCULATION
After rapid mixing, the water flows into flocculation basins, where the velocity of water is slowed and the floc has time to grow bigger.

SEDIMENTATION
Next, the water flows into sedimentation basins, where heavy floc particles sink to the bottom and are removed.

FILTRATION
Now the water travels through large filters made up of layers of anthracite, sand, and gravel. These filter layers remove remaining microscopic particles and microorganisms. Disinfectant is added at this point.

POST-RAPID MIXING
Finally, the water is disinfected to protect against bacteria. Lime is added for pH adjustment and phosphate added for corrosion control. Fluoride is added to support good dental health.

CLEARWELLS
After treatment, the water travels through a series of three clearwells allowing water to have contact time with the disinfectant before leaving the plant. This deters bacteria regrowth when water enters the distribution system.

WATER TOWER STORAGE TANKS
Elevated water tanks dampen pressure fluctuations in the distribution system and are also used as storage for emergencies such as fires.

DISTRIBUTION
Treated water is then pumped into pipes that deliver it to more than 40,000 residences and businesses in West Columbia and Lexington County.

Tell Me About the *Water Quality*

WATER QUALITY DATA TABLE

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The table on the next page lists all the drinking water contaminants that we detected during the calendar year of this report. Although many more contaminants were tested, only those substances listed below were detected. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

WHAT DO THE SYMBOLS MEAN?

SYMBOL	MEANING	DESCRIPTION
AL	Action Level	The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.
IOC's	Inorganic Contaminants	Chemicals that do not arise from living growth, such as metals and minerals.
MCLG	Maximum Contaminant Levels Goals	The level of a contaminant in drinking water below which there is no known or expected risk of health.
MRDL	Maximum Residual Disinfectant Level	The highest level of a residual disinfectant that is allowed in drinking water. ND (Not Detected): Not detectable at testing limit.
MCL	Maximum Contaminant Level	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.
pCi/L	Pico curies per liter	Pico curies per liter are a measure of the radioactivity in water.
NTU	Nephelometric Turbidity Units	Nephelometric turbidity units are a measure of the clarity of the water.
ppm	Parts per million or milligrams per liter	One part per million corresponds to one minute in two years or a single penny in $10,000.
TTHM	Total Trihalomethanes	A group of four organic compounds may form when natural organic matter reacts with chlorine.
ppb	Parts per billion or micrograms per liter	One part per billion corresponds to one minute in approx. 1903 years or one penny in $10,000,000.
TT	Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
LRAA	Locational Running Annual Average	An average of the four quarters from 2016.
NA	Not Applicable	Does not apply.

2020 TEST RESULTS LAKE MURRAY WATER PLANT

Contaminant	MCLG	MCL	Highest Detected Level	Violation	Typical Source	Sample Period
Nitrate (ppm)	10	10	0.042 - DHEC Result	None	Runoff from fertilizer use	2020
Fluoride (ppm)	4	4	0.61 - Range = 0.159 – 0.979 DHEC Result	None	Erosion of natural deposits; water additive which promotes strong teeth	2020
Copper (ppm)	1.3	AL=1.3	90% = 0.056	None	Corrosion household plumbing Erosion of natural deposits	2019
Lead (ppb)	0	AL=15	90% = 0 Range=0 - 0.006	None	Corrosion household plumbing Erosion of natural deposits	2019
Haloacetic Acids (ppb)	N/A	60	LRAA(ppb) = 12.26 Range= 0-24.31	None	By-products of drinking water disinfection	2020 Quarterly
Chloramines (ppm)	MRDL= 4	MRDL=4	3.25 Range = 2.3 – 3.80	None	Water additive used to control microbes	2020
Total Organic Carbon (ppm)	N/A	TT = 1.0 (35%) Removal	42.9% Range=37.8 –48.4% Removal	None	Naturally Present in the Environment	2020

TURBIDITY:

Lake Murray Plant's highest detected level: 0.31ntu.
MCLG:< 0.3 ntu in 95 % of samples per month
Possible sources: soil runoff
Met MCLG 100%

TOTAL TRIHALOMETHANES:

MCL: 80 ppb
Range = 13.82 - 31.36
LRAA = 21.78
Source = By-product of disinfection

2020 TEST RESULTS RIVERSIDE WATER PLANT

Contaminant	MCLG	MCL	Highest Detected Level	Violation	Typical Source	Sample Period
Nitrate (ppm)	10	10	0.30 - DHEC Result	None	Runoff from fertilizer use	2020
Fluoride (ppm)	4	4	0.00 - Range = 0.00 - <0.10 DHEC Result	None	Erosion of natural deposits; water additive which promotes strong teeth	2020
Copper (ppm)	1.3	AL = 1.3	90% = 0.056	None	Corrosion household plumbing Erosion of natural deposits	2019
Lead (ppb)	0	AL=15 ppb	90%=0 Range = 0 - 0.006	None	Corrosion household plumbing. Erosion of natural deposits	2019
Haloacetic Acids (ppb)	N/A	60	LRAA(ppb) = 23.28 - Range = 15.76 - 26.57	None	By-products of drinking water disinfection	2020 Quarterly
Chloramines (ppm)	MRDL= 4	MRDL=4	1.10 Range = 0.60 – 1.32	None	Water additive used to control microbes	2020
Total Organic Carbon (ppm)	N/A	TT = 1.0 (35%) Removal	46.2% Range=38.0 - 53.1 Removal	None	Naturally Present in the environment	2020

TURBIDITY:

Riverside Water Plant's highest detected level: 0.12ntu.
MCLG:< 0.3 ntu in 95 % of samples per month
Possible sources: soil runoff
Met MCLG 100%

TOTAL TRIHALOMETHANES:

MCL: 80ppb
Range = 19.73 – 44.63
LRAA = 30.15
Source = By-product of disinfection

2020 DETECTABLE UNREGULATED CONTAMINANTS

Contaminants	Range	Average Result
2-Methoxyethanol	0.577 - 1.05 ug/l	1 ug/l
HAA5	0 - 109.58 ug/l	22 ug/l
HAA6Br	0 - 28 ug/l	5 ug/l
HAA9	0 - 115 ug/l	26 ug/l
Manganese	0.401 - 1120 ug/l	13 ug/l
Bromide	20.1 -235 ug/l	40 ug/l
Total Organic Carbon	1.030 - 13.100 mg/l	4 mg/l

Lead and Copper testing is performed every three (3) years based on the monitoring program prescribed by SCDHEC when test results are consistently below the MCL.

WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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. In some cases, radioactive material. Water can also can pick up substances resulting from the presence of animals or from human activity, including:

- microbial contaminants, such as viruses and bacteria, that 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 water runoff, and residential uses
- 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

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Source Water

SOURCE WATER PROTECTION TIPS

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.
- Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help.
- If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste - Drains to River" or "Protect Your Water."
- Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

ADDITIONAL INFORMATION FOR LEAD

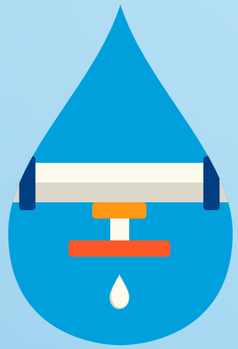
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of West Columbia is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing componentson private property. 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.

WATER CONSERVATION TIPS

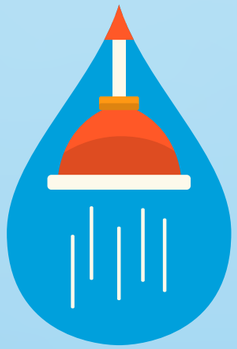
Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers - a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They're inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace.
- To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak.
- Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler
- parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to
- reduce next month's water bill!
- Visit www.epa.gov/watersense for more information.

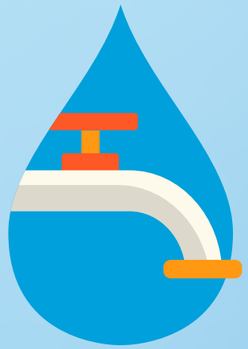
RUN THEM
FULLY LOADED



REPAIR
VISIBLE LEAK



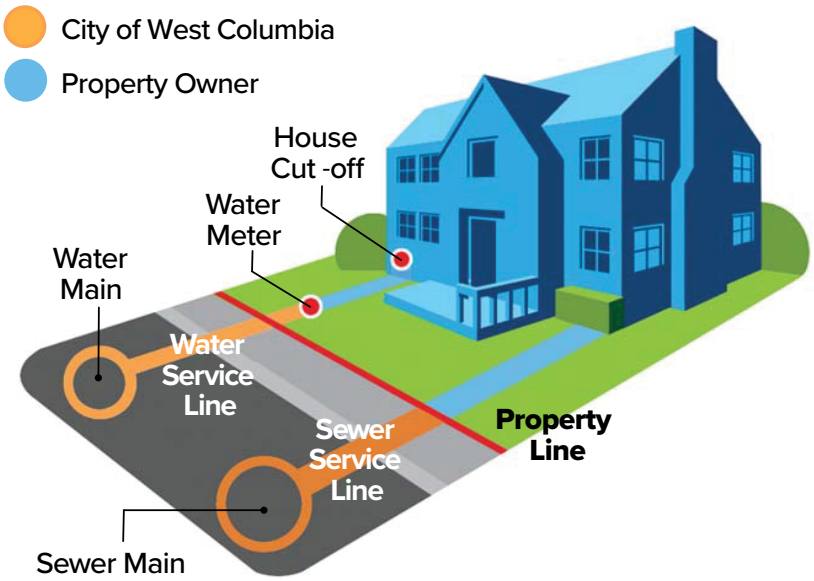
TAKE
SHORTER SHOWERS
5 MINS
SHOWER = 24 GALLONS



WHILE BRUSHING
YOUR TEETH
TURN OFF
THE WATER

WATER & SEWER LINE RESPONSIBILITY

The image below shows which portions of a customers' water and sewer service are the responsibility of West Columbia Water and which are the responsibility of the property owner. West Columbia Water cannot repair private lines.



THE PROPERTY OWNER owns and is responsible for maintaining:

- The water service line running between the meter and the building
- All plumbing attached to the water service line
- The sewer service line up to the property line

WEST COLUMBIA WATER owns and maintains:

- The water main
- The water service line running to the meter
- The meter box
- The meter
- The sewer service line from the property line to the sewer main
- The sewer main

QUESTIONS?

The City welcomes your questions and comments regarding our drinking water. To learn more about the City of West Columbia's Water Department and Water Quality, please participate in the following ways:

Questions/Comments: contact the Customer Service at (803) 791-1880.

Council Meetings: The West Columbia City Council, the elected officials who control West Columbia's water system, conducts regular monthly meetings on the first Tuesday of every month. These meetings are conducted at 6:00 p.m. in the Council chambers in City Hall at 200 N. 12th Street, West Columbia, SC. The public is welcome to attend.