

Public Water System ID Number: MO5010754

Table of Contents

Directors Award	3
Watershed Stewardship at Fellows Lake	6
Where Your Water Comes From	7
About Our Watershed	8
Important Drinking Water Definitions	9
Water Quality Summary	. 10
Unregulated Contaminant Monitoring	13
Water at a Glance	14
How Your Water is Treated	15
Water Savings Tips	17



This report contains important information about Springfield's drinking water. For more information regarding this assessment or for additional water quality data, call the City Utilities Manager-Water Quality Lab at 417-831-8822.



For the 23rd year in a row, City Utilities of Springfield's Blackman and Fulbright Water Treatment Plants have received the Directors Award from the Partnership for Safe Water, a program of the American Water Works Association (AWWA). This award is given in recognition of the efforts to achieve excellence in water quality far beyond what is required by federal regulations. Less than one percent of the treatment plants in the United States have received this recognition.

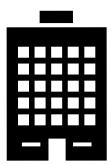






Water is important for all life. While City Utilities provides water, natural gas, electricity, transit, and broadband services to the City of Springfield—water is the only commodity that our customers ingest. Providing safe drinking water is not an option, but is a necessity to keep our community healthy.

City Utilities' commitment to you, our neighbor, is that our team will continue to work hard every day to ensure you not only have safe drinking water, but great tasting water too.



ATTENTION

Landlords and **Apartment Owners:** Please share a copy of this report with your tenants about the quality of their drinking water.





WATERSHED STEWARDSHIP AT **FELLOWS LAKE AND BEYOND**

Mike Kromrey, Executive Director, Watershed Committee of the Ozarks

We can't make it rain. Over 99 percent of the watersheds that collect our drinking water are privately owned. Our population in southwest Missouri is growing, and weather and long-term climate trends are uncertain. Few things are as important as providing clean, safe, affordable drinking water; few things are as easy to overlook because of a job well done. Keeping up the good work for years to come will require long-term vision, planning, and building on our current success with urgency. Fellows Lake provides the testing ground and template for future efforts. Keeping Fellows Lake clean has always been, and always will be, paramount. How we recreate around clean water can take different forms, and the current plans mark a shift in strategy: from focus on protection through restriction, to a focus on engagement and stewardship. Low impact "silent sports," like hiking, cycling, running, paddling, fishing, hunting, bird watching...even kite flying, provide the chance to share the resource, build community, and engage patrons with education and stewardship. As the venerable quote by Baba Dioum states: "In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught." In 2021, Watershed Committee of the Ozarks (WCO) signed on as a community partner

at Fellows to expand on a long and productive partnership with City Utilities to help people connect and "protect".

What about the other 99 percent of our drinking water catchment-mostly rural/agricultural-that is privately owned? The intersection of everything we've learned so far is that producers are not our biggest challenge, they are our best opportunity! With a few key practices like implementing riparian buffers and rotational grazing, producers can realize increased productivity while improving runoff water quality, as well as absorption into the soils and aquifer. The Little Sac Grazing Demonstration, located on CU property just below Fellows Lake, serves as an outdoor classroom for partners to showcase this regenerative transition.

FELLOWS LAKE SEES NEW RECREATION WITH WATER QUALITY TOP-OF-MIND

Fellows Lake is quickly becoming a recreational destination for the area-with biking, boating, fishing, and hiking opportunities in abundance, and more exciting things on the horizon. The strong partnership between City Utilities of Springfield, Ozarks Greenways, the Watershed Committee of the Ozarks, and TrailSprings has helped provide and grow the vision for the area.

These partner initiatives have enhanced the area, while placing a high priority on the role of the lake's water to the community.

In the end we will conserve only what we love; we will love only what we understand; and we will understand only what we are taught. 🧾 🗾



WHERE YOUR WATER **COMES FROM**

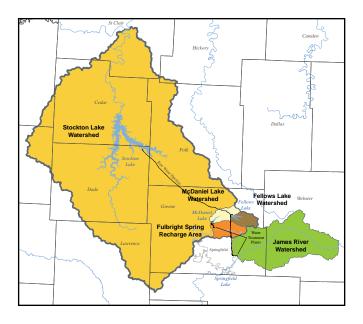
City Utilities' drinking water comes from a variety of lakes, rivers, wells, and a spring. Approximately 74 percent of Springfield's drinking water comes from surface waters, such as lakes and rivers. The remaining comes from groundwater wells and a spring.

City Utilities' Fulbright and Blackman Water Treatment Plants use a combination of sources for water treatment, including both surface and groundwater. Fulbright is located on the northern edge of Springfield and is served by Fulbright Spring (the original source for the city), a deep well, and McDaniel Lake. The Blackman Plant is in the southeastern corner of the city and receives water from Fellows Lake and James River. Both Fellows and McDaniel Lakes can be supplemented with water from Stockton Lake. Another deep well can be found in the distribution system and is used as an additional source when needed.

ABOUT OUR WATERSHED

Springfield is fortunate to have a variety of natural resources available to supply our community's drinking water. Springfield's water sources are unique compared to other communities in southwest Missouri. While other towns and rural residents rely on groundwater wells, customers of City Utilities have an abundance of surface water sources.

- The wells in Springfield come from the aquifer which are replenished by precipitation soaking into the ground. Healthy soils increase the quality and quantity of water that recharges the aquifer.
- The "riparian area" is the land along streams and rivers. Forested riparian areas are one of the best ways to prevent flood damage, erosion, and nutrient pollution to our drinking water.
- Prescribed or rotational grazing practices help improve soil health and water quality, while over-grazed pastures do the opposite.
- Nutrients from fertilizer, animal or human waste, and sediment from erosion can cause algae blooms in our drinking water reservoirs which can negatively impact our water supply.
- The cleaner our sources of drinking water, the better it will taste and smell, less it will cost, and more affordable it will be for the consumers.



SOURCE WATER ASSESSMENT

The Department of Natural Resources completed a source water assessment for City Utilities' drinking water sources. The assessment showed that, as expected for surface waters, the sources are susceptible to viruses and microbiological contaminants, which are inactivated by conventional treatment. In addition, all surface waters are moderately susceptible to land-use activities within the watershed. City Utilities, in support of the Watershed Committee of the Ozarks, will continue to encourage low-impact land use to reduce detrimental effects to our drinking water sources. The source water assessment for our system can be found online at http:// drinkingwater.missouri.edu. City Utilities' Public Water System number is 5010754.



IMPORTANT DRINKING WATER DEFINITIONS

90th percentile: For lead and copper testing. 10% of test results are above this level and 90% are below this level.

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

HAA5: Haloacetic acids (mono-, di-, and tri-chloroacetic acid, and mono- and di-bromoacetic acid) as a group.

Locational Running Annual Average (LRAA): The average of samples collected at a particular location, calculated from the most recent 4 quarters.

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 health risk. 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 disinfectant use to control microbial contamination.

Nephelometric Turbidity Units (NTU): A measure of cloudiness of the water.

Picocuries per Liter (pCi/L): Erosion of natural deposits

Population: 172,025. This is the equivalent residential population served including non-bill paying customers.

Range of Results: Shows the lowest and highest levels found during a testing period. If only one sample was taken, then this number equals the highest test result or highest value.

Running Annual Average (RAA): The average of sample analytical results for samples taken during the previous four calendar quarters.

Total Trihalomethanes (TTHM):

Total trihalomethanes (chloroform, bromodichloromethane, dibromochloromethane, and bromoform) as a group.

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

Turbidity: A measure of the cloudiness or clarity of water. It is monitored because it is a good indicator of both water quality and the effectiveness of our filtration system.

UNIT DESCRIPTIONS & DEFINITIONS

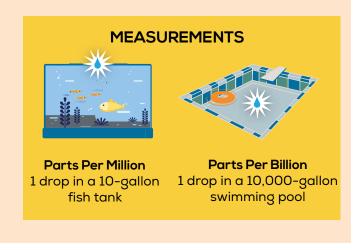
Grains Per Gallon (GPG): measure of hardness 1 GPG = 17.1 ppm

> Parts Per Million (ppm): or milligrams per liter (mg/L)

Parts Per Billion (ppb): or micrograms per liter (ug/L)

Not Detected (ND): not detectable at testing limits

N/A: not applicable



CITY UTILITIES OF SPRINGFIELD - WATER QUALITY SUMMARY 2022

Detected Contaminants	Units	MCLG	MCL	Average Level	Range Detected	Compliance	Major Sources
Treatment Plants							
Fluoride	ppm	4	4	0.58	0.02-0.79	YES	Added during treat- ment for dental health or dissolved from natural deposits
Total Chlorine	ppm	4 (MRDLG)	4 (MRDL)	1.38	1.13 - 1.76	YES	Water additive used for disinfection
Barium	ppm	2	2	0.070	0.0392 - 0.116	YES	Discharge of drilling wastes or from metal refineries; erosion of natural deposits
Nitrate	ppm	10	10	0.71	ND (<0.05) - 1.60	YES	Runoff from fertilizer; leaching from septic tanks or sewage; erosion of natural deposits
Nitrite	ppm	1	1	ND (<0.01)	ND (<0.01)	YES	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Total Organic Carbon	mg/L	N/A	TT: O	1.37	0.66 - 2.34	YES	Naturally occurring
Turbidity	NTU	N/A	TT: at least 95% of samples <0.3 NTU	Highest S Measurement Percentage o <0.3 NTU = Fully Compliant -	nt = 0.08 f samples = 100%	YES	Soil runoff



Detected Contaminants	Units	MCLG	MCL	Highest LRAA	Range Detected	Compliance	Major Sources	
Distribution System								
Total Trihalomethanes	ppb	N/A	80 (LRAA)	51	15.4 - 76.5	YES	By-product of drinking water disinfection	
Haloacetic Acids	ppb	N/A	60 (LRAA)	26	1.6 - 36.7	YES	By-product of drinking water disinfection	
				2022* Testing	g Results			
Lead	ppb 0	0	AL = 15	90th Percentile Values	Range Detected	YES	Corrosion of household	
				3.9 -4.9	ND (<0.01) - 22.7		plumbing; erosion of natural deposits	
Copper	ppm	1.3	AL = 1.3	0.101 - 0.11	ND(<0.12) - 0.586	YES		
Bacteria	% positive samples	0	coliform bacteria in no more than 5% of samples	2022 testing - highest monthly % positive 0.81% November		YES	Naturally present in the environment - No fecal coliform or <i>E. coli</i> in 1,507 tests in 2022	
Detected Contaminants	Units	MCLG	MCL	Highest Value	Range of Sampled Result(s)	Compliance	Major Sources	
Kansas Street W	Kansas Street Well							
Combined Radium (-226 & -228)	pCi/l	0	5	1.1	1.1	YES	Erosion of natural deposits	
Radium-226	pCi/l	0	5	1.1	1.1	YES	Erosion of natural deposits	
Additional Monitoring Data (General Water Quality Parameters)								
Analyte	U	nits	Average	Range	Com	ments	Major Sources	
Hardness	GPG		9.10	5.3 - 11.7	Hardness refers to the mineral content of water.		Erosion of natural	
naruness	ppm		155.2	90.8 - 200.6	Calcium and magnesium are the main contributors to water hardness.		UEDOSILS .	

Violations and Health Effects Information

Compliance Period	Analyte	Type			
No Violations Occurred in the Calendar Year of 2022					

^{*} System-wide testing of representative homes for lead and copper (which may be imparted to the water from plumbing and fixtures) was conducted in two rounds of standard monitoring during 2022.







UNREGULATED CONTAMINANT MONITORING RULE RESULTS - 2019

UCMR4							
Detected Contaminants	Collection Date of HV	High Value (HV)	Range Detected	Unit			
Bromide	08/20/19	39.5	27.7 - 39.5	ppb			
HAA5	05/13/19	42.28	5 - 42.28	ppb			
HAA6Br	08/20/19	19.88	6.1 - 19.88	ppb			
НАА9	05/13/19	54.51	9.9 - 54.51	ppb			
Manganese	02/04/19	0.53	0 - 0.53	dqq			
Total Organic Carbon	05/13/19	3880	1070 - 3880	ppb			

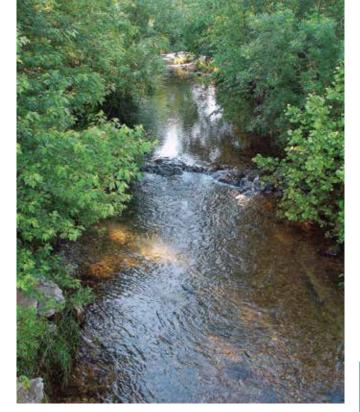
Unregulated contaminants do not have a maximum contaminant level (MCL) associated with their occurrence. Utilities are periodically required to sample for unregulated contaminants to assist the EPA in determining if an MCL is needed for those contaminants. During the latest round of monitoring our utility tested for 30 contaminants - the 6 contaminants measured at detectable levels are listed in the table (ABOVE).

WHAT ARE THE SOURCES OF **CONTAMINANTS?**

As water travels over the land's surface or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can be polluted by animals or human activity. Contaminants that might be expected in untreated water include microbial contaminants, such as viruses and bacteria; inorganic contaminants, such as salts and metals;

organic chemicals from pesticides, herbicides, and industrial or petroleum use; and radioactive materials. 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 SAFE** DRINKING WATER HOTLINE: 800-426-4791.





WATER AT A GLANCE ABOUT LEAD AND COPPER

City Utilities fully complies with the lead and copper provisions of the Safe Drinking Water Act. In 2022, City Utilities gathered samples from a number of residences in accordance with state and federal regulations. EPA regulations require that at least 90 percent of the samples are below the action level for both lead (15 ppb) and copper (1.3 ppm). Two rounds of lead and copper sampling were completed in 2022. Both sampling rounds had 90th percentile values below the action levels for lead and copper.

Special Lead and Copper Notice: 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. CU 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 (800-426-4791) or https:// www.epa.gov/ground-water-and-drinking-water/ basic-information-about-lead-drinking-water.

SPECIAL HEALTH INFORMATION

Some people may be more vulnerable to certain types of contamination in drinking water than the general population. Immuno-compromised individuals, people with cancer who are undergoing chemotherapy, people who have undergone organ transplants, people with HIV/ AIDS or other immune system disorders, some elderly persons, and infants can be particularly at risk for infections. These people should seek advice from their healthcare provider. **Environmental Protection Agency and Centers for** Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the EPA hotline listed below:



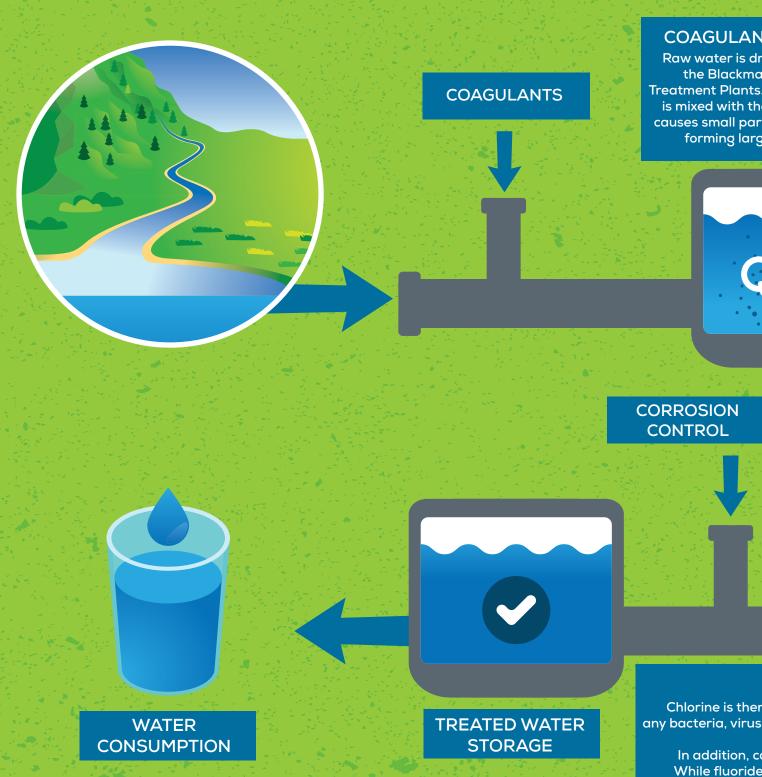
Environmental Protection Agency's Safe Drinking Water Hotline: 800-426-4791



HOW YOUR WA

added to help pr adjusted to pro place before your home, or the qualit

City Utilities takes great measures to you and your family to drink. This



TER IS TREATED

keep your water clean and safe for process takes place in four steps:

TS/FLOCCULATION

awn into mixing basins at n and Fulbright Water During this step, coagulant e raw water. This process ticles to stick to each other, er particles called floc.

SEDIMENTATION

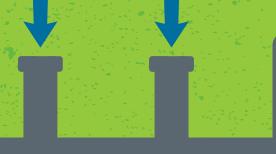
Next, the particles slowly become heavier and settle to the bottom of a basin. This is how most of the dirt and contaminants are removed from the water.





FLUORIDE

DISINFECTION



DISINFECTION

added and given plenty of time to inactivate es, or other harmful microbes that might remain.

arbon is used to help the water taste great.
occurs naturally in water, a small amount is
otect oral health. Finally, the pH of the water is
tect pipes from corrosion. All these steps take
the water goes into the distribution system,
any business. City Utilities carefully monitors
y of water during the treatment process
and throughout the water system.



To finish the clarifying of the water, it is then filtered through layers of fine, granulated materials consisting of carbon, sand, and rocks. As smaller particles are removed, cloudiness diminishes, and clear water emerges.

10 WAYS TO SAVE WATER AT HOME

- 1. Check your faucet and pipes for leaks.
- 2. Plant flowers that require less water.
- 3. Water your yard and outdoor plants early or late in the day to reduce evaporation.
- 4. Only run the washing machine and dish washer when you have full loads.
- 5. Install a rain barrel for outdoor watering.
- 6. Use a broom to clean driveways rather than a hose.
- 7. Limit your shower time.
- 8. Turn off water while brushing your teeth.
- 9. Use a wash basin to wash fruits and vegetables.
- 10. Fix dripping pipes, faucets, and hoses.

Visit cityutilities.net to see rebates offered by City Utilities to help you save even more!



City Utilities Water Plant Operators work around the clock monitoring City Utilities' water treatment process, facilities, and water sources.



Fulbright Water Treatment Plant was constructed in 1940 and is an American Water Works Association Landmark site. Today, the plant provides Springfield with nearly 21 million gallons of water each day.

Nater Numbers

EVEN or ODD WATERING SCHEDULE

City Utilities is committed to helping our customers use their water and energy wisely. With your help, Springfield may be able to save 5 million gallons of water every day with the Even-Odd Watering Schedule.



