This year, as in years past, your tap water met all USEPA and state drinking water health standards. We and our bulk water provider vigilantly safeguard the water supply, and we are able to report that the O'Fallon Water system had no violation of a contaminant level or of any other water quality standard in the previous year. This report summarizes the quality of water that we provided last year, including details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

If you have any questions about this report or concern about the water system, please contact Heide Bell in the O'Fallon Public Works Department at 618-624-4500, ext. 3. If you would like to learn more, please feel welcome attending any of our regularly scheduled Public Works Committee meetings held at the City Hall, usually on the 4th Monday of each month at 6:30 P.M.

WHERE YOUR WATER COMES FROM

Illinois EPA considers all surface water sources of community water supply to be susceptible to potential pollution problems, hence, the reason for mandatory treatment for all surface water supplies in Illinois. Mandatory treatment includes coagulation, sedimentation, filtration, and disinfection.

Our source of treated water comes from Illinois-American Water Company (IAWC). The East St Louis Water Treatment Facility draws surface water for treatment from the Mississippi River. The Mississippi River is subject to a variety of influences including agricultural, municipal, and industrial activities. Farm chemicals may be seasonally elevated in the river. Extensive monitoring and treatment ensure high-quality water service regardless of variations in the source water. The Illinois EPA has completed a source water assessment for the East St. Louis system and a copy is available upon request. To view a summary version of the completed Source Water Assessments, including Importance of Source Water; Susceptibility to Contamination determination; and documentation / recommendation of Source Water Protection Efforts, you may access the Illinois EPA website at http://dataservices.epa.illinois.gov/swap/factsheet.aspx

Important Information About Drinking Water

In order to ensure that tap water is safe to drink, USEPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).

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

- <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife;
- <u>Inorganic contaminants</u>, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming;
- <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff and septic systems;
- <u>Radioactive contaminants</u>, which may be naturally occurring or be the result of oil and gas production and mining activities.

Special Health Information

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 disorder, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

About 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 O'Fallon 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 https://www.epa.gov/safewater/lead.

The most common source of lead in tap water is from the customer's plumbing and their service line. Our water mains are not made of lead; however, the water service line that carries the water from the water meter to your home could be. Homeowners' service lines may be made of lead, copper, galvanized steel or plastic. You can assess your service line material where it enters your home, typically in your basement, crawl space or garage, near the inlet valve. You cannot see, smell or taste lead, and boiling water will not remove lead. Here are steps you can take to reduce your potential exposure if lead exists in your home plumbing.

- Flush your taps. The longer the water lies dormant in your home's plumbing, the more lead it might contain. If the water in your faucet has gone unused for more than six hours, flush the tap with cold water for 30 seconds to 2 minutes before drinking or using it to cook. To conserve water, catch the running water and use it to water your plants.
- Use cold water for drinking and cooking. Hot water has the potential to contain more lead than cold water. If hot water is needed for cooking, heat cold water on the stove or in the microwave.
- Routinely remove and clean all faucet aerators.
- Look for the "Lead Free" label when replacing or installing plumbing.
- Follow manufacturer's instructions for replacing water filters in household appliances, such as refrigerators and ice makers, as well as home water treatment units and pitchers. Look for NSF 53 certified filters.
- Flush after plumbing changes. Changes to your service line, meter or interior plumbing may result in sediment, possibly containing lead, in your water supply. Remove the strainers from each faucet and run the water for 3 to 5 minutes.

CRYPTOSPORIDIUM

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

We have included two tables which will give you a better picture of the contaminants that were detected in your water. The first table contains the results of testing by our source water supplier (Illinois-American Water Company). The second table includes testing results for our O'Fallon distribution system. These "Water Quality Data" tables list all state and federally regulated contaminants detected during the Consumer Confidence Report (CCR) reporting year and include some unregulated contaminants detected for your information. For help with interpreting these tables, see the "Table Definitions" section and footnotes.

HOW TO READ THIS TABLE (FROM LEFT TO RIGHT)

- Starting with Substance (with units), read across.
- Year Sampled is usually in 2022 but may be a prior year.
- A Yes under Compliance Achieved means the amount of the substance met government requirements.
- MCLG/MRDLG is the goal level for that substance (this may be lower than what is allowed).
- MCL/MRDL/TT/Action Level shows the highest level of substance (contaminant) allowed.
- Highest, Lowest or Average Compliance Result represents the measured amount detected.
- Range tells the highest and lowest amounts measured.
- Typical Source tells where the substance usually originates.

Some unregulated substances are measured, but maximum contaminant levels have not been established by the government. These contaminants are shown for your information.

NOTE: Regulated contaminants not listed in this table were not found in the treated water supply. The IEPA requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of the data in the tables below, though accurate, may be more than one year old.

Illinois-American Water Company (IAWC) - (Source Water Supply – PWS: IL1635040) 2021 Water Quality Data

Total Organic Carbon

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by IEPA. TOC has no health effects but contributes to the formation of disinfection by-products. Reduction of TOC can help to minimize disinfection by-product formation.

	TURBIDITY - Collected at the Treatment Plant									
Substance (with units)	Requirement	Limit (Treatment Technique)	Level Detected	Compliance Achieved	Likely Source of Contamination					
Turbidity	Highest single measurement	1 NTU	0.3 NTU	Yes	Soil Runoff					
(NTU)	Lowest monthly % meeting limit	0.3 NTU	100%	Yes	Soil Runoff					

Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of the effectiveness of our filtration system, water quality, and disinfectants. The treatment technique requires that at least 95% of routine samples are less than or equal to 0.3 NTU, and no sample exceeds 1 NTU. We are reporting the percentage of all readings meeting the standard of 0.3 NTU, plus the single highest reading for the year.

	REGULATED SUBSTANCES - Collected at the Treatment Plant										
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Compliance Result	Range Detected	Typical Source				
Arsenic (ppb)	2022	Yes	0	10	1	0 to 1	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.				
Fluoride (ppm)	2022	Yes	4	4.0	0.8	0.78 to 0.78	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.				
Nitrate measured as nitrogen (ppm)	2022	Yes	10	10	4	1.11 to 4.18	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.				
Combined Radium 226/228 (pCi/L)	2020	Yes	0	5	1.29	1.29 to 1.29	Erosion of natural deposits.				
Gross alpha excluding radon and uranium (pCi/L)	2020	Yes	0	15	2.84	2.84 to 2.84	Erosion of natural deposits.				
Atrazine (ppb)	2022	Yes	3	3	0.8	0 to 0.8	Runoff from herbicide used on row crops.				

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, you should ask advice from your health care provider.

While your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPAs standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to

	OTHER SUBSTANCES OF INTEREST - Collected at the Treatment Plant									
Substance (with units)	Year Sampled	Compliance Achieved	MCLG	MCL	Highest Result	Range Detected	Typical Source			
Sodium (ppm)	2022	Yes	NA	NA	23	15.5 to 22.7	Erosion from naturally occurring deposits. Used in water softener regeneration.			

For healthy individuals the sodium intake from water is not important because a much greater intake of sodium takes place from salt in the diet. However, sodium levels above the recommended upper limit may be of concern to individuals on a sodium restricted diet.

other health effects such as skin damage and circulatory problems.

UNREGULATED CONTAMINANT MONITORING RULE

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

ADDITIONAL WATER QUALITY PARAMETERS OF INTEREST								
Parameter	Units	Year	Average Result	Range Detected	Typical Source			
Manganese*	ppb	2019	7.3		Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.			

^{*} Manganese has a Secondary MCL of 150 ppb.

PER- AND POLYFLUOROALKYL SUBSTANCES

Per- or polyfluoroalkyl substances (PFASs) are synthetic substances used in a variety of products, such as: stain resistant fabric, non-stick coatings, firefighting foam, paints, waxes, and cleaning products. They are also components in some industrial processes like electronics manufacturing and oil recovery. While the EPA has not developed drinking water standards for PFAS, Illinois American Water recognizes the importance of testing for these contaminants. Compounds detected are tabulated below, along with typical sources.

For more information about PFAS health advisories https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx

UNREGULATED	PERFLUORINATE	D COMPOUNDS
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Parameter	Year Sampled	Units	Health-Based Guidance Level	Highest Result	Range Detected	Typical Source
Perfluorooctane Sulfonic Acid (PFOS)	2022	ppt	14	2.8	0 to 2.8	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorooctanoic Acid (PFOA)	2022	ppt	2	2.4	0 to 2.4	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorohexanoic Acid (PFHxA)	2022	ppt	560,000	3.6	0 to 3.6	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorobutanesulfonic Acid (PFBS)	2022	ppt	2,100	4.6	0 to 4.6	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.

The health-based guidance levels are intended to be protective of all people consuming the water over a lifetime of exposure. It is important to understand that guidance levels are not regulatory limits for drinking water. Rather, the guidance levels are benchmarks against which sampling results are compared to determine if additional investigation or other response action is necessary.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

The EPA created the Unregulated Contaminants Monitoring Rule (UCMR) to assist them in determining the occurrence of unregulated contaminants in drinking water and whether new regulations are warranted. The first Unregulated Contaminants Monitoring Rule (UCMR1) testing was completed in 2003 for a list of contaminants specified by the EPA. Unregulated contaminants are those for which the EPA has not established drinking water standards. UCMR2 testing was conducted between November 2008 and August 2009, and UCMR3 assessment monitoring was conducted between January 2013 and December 2016. The fourth list of contaminants to monitor as part of the UCMR was published by the EPA in December 2016. UCMR4 testing began in 2018 and was completed in 2020. The results from the UCMR monitoring are reported directly to the EPA. The results of this monitoring are incorporated in the data tables in this report as appropriate. For more information, contact our Customer Service Center at 1-800-422-2782.

PFAS Monitoring

PFAS refers to per- and polyfluoroalkyl substances, a class of synthetic chemicals, manufactured for industrial applications and commercial household products such as: non-stick cookware; waterproof and stain resistant fabrics and carpets; firefighting foam and cleaning products. The properties that make these chemicals useful in so many of our every-day products also resist breaking down and therefore persist in the environment. Exposure may be from food, food packaging, consumer products, house dust, indoor and outdoor air, drinking water and at workplaces where PFAS are made or used.

The science and regulation of PFAS and other contaminants is always evolving, and Illinois American Water strives to be a leader in research and development. PFAS contamination is one of the most rapidly changing areas in the drinking water field. We have invested in our own independent research, as well as engaging with other experts in the field to understand PFAS occurrence in the environment. We are also actively assessing treatment technologies that can effectively remove PFAS from drinking water, because we believe that investment in research is critically important to addressing this issue.

IL EPA established Health Advisory Levels for several PFAS analytes. For more information about PFAS health advisories https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx

O'Fallon Public Works Department (Water Distribution System - PWS. ID: IL1631100)

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No.	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	5% of monthly samples are	1.9		0	No	Naturally present in the
	positive					environment.

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 these assessments.

Lead and Copper¹ (Collected at customers' taps)

Lead and Copper	Year Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2020	1.3	1.3	0.341	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead ²	2020	0	15	2	0	ppb	No	Corrosion of household plumbing systems; erosion of natural deposits.

¹ Compliance with the Lead and Copper Rule (LCR) is determined by the levels of lead and copper found in samples taken from customers' taps. LCR requirements are met if the 90th percentile of all samples taken does not exceed the action level of 15 ppb for lead or 1.300 ppm for copper.

Other Compounds (Measured in the distribution system)

Disinfectants/ Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine ³	2022	2.7	2-3	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAAs)	2022	35	14 - 22.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalmoethanes (TTHM)	2022	51	18.8 - 47	No goal for the total	80	ppb	N	By-product of drinking water disinfection.

³ Chlorine and chloramines are disinfecting agents added to control microbes that otherwise could cause waterborne diseases or other water quality concerns. Most water systems in Illinois are required by law to add either chlorine or chloramines. Levels well in excess of the MRDL could cause irritation of the eyes or nose in some people. The values reported reflect multiple locations in the service area.

TTHMs & HAAs: Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

² Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated levels of lead in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the EPA's Safe Drinking Water Hotline 800-426-4791.

UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is necessary. Every five years, the EPA issues a new list of no more than 30 unregulated contaminants to be monitored.

Parameter	Units	Year	Range Detected	Likely Source of Contamination
Total Haloacetic Acids	ppb	2020	9.7 - 15	By-product of drinking water disinfection.
Total Haloacetic Acids - Br	ppb	2020	1.1 - 2.7	By-product of drinking water disinfection.
Total Haloacetic Acids – UCMR4	ppb	2020	11 - 18	By-product of drinking water disinfection.
Manganese*	ppb	2020	6 -7.2	Naturally-occurring elemental metal; largely used in aluminum alloy production. Essential dietary element.

^{*} Manganese has a Secondary MCL of 50 ppb.

Table Definitions and Abbreviations - These are terms that may appear in your report.

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

Compliance Achieved: Indicates that the levels found were all within the allowable levels as determined by the USEPA.

LRAA: Locational Running Annual Average.

Level 1 Assessment: A Level 1 assessment is 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 Level 2 assessment is 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. See also Secondary Maximum Contaminant Level (SMCL).

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 routinely 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 contamination.

MERM /year: Millirems per year (a measure of radiation absorbed by the body).

MFL: Million fibers per liter.

NA: Not applicable.

ND: Not detectable at testing limits.

Nephelometric Turbidity Units NTU:

Measurement of water clarity, or turbidity, of the water.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

ppm (parts per million): One part substance per million parts water, or milligrams per liter.

ppb (parts per billion): One part substance per billion parts water, or micrograms per liter.

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

RAA: Running Annual Average

Range of Detections: The range of individual sample results, from lowest to highest, that were collected during the sample period.

Secondary Maximum Contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

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

%: Percent

DID YOU KNOW?

An approved backflow prevention device is required for each sprinkler system or additional consumer water system. If you have a lawn irrigation system, please see a Cross Connection Control Device Inspector (CCCDI) to have a backflow prevention device installed. An annual inspection of the device by a Cross Connection Control Device Inspector (CCCDI) is required by the State of Illinois Plumbing Code. Please call the Engineering Group at 618-624-4500, ext. 3 if you have any questions regarding this issue. To administer this program, the City of O'Fallon has partnered with Backflow Solutions, Inc. or BSI Online, the nation's leading backflow data management firm.

The backflow prevention survey being completed is an IEPA regulation requirement.

Protecting your Drinking Water Supply

Quality drinking water starts upstream. Everyone can help maintain and improve drinking water supplies through the following actions:

- Properly dispose of pharmaceuticals, household chemicals, oils and paints. Materials can impact water ways if poured down the drain, flushed down the toilet, or dumped on the ground.
- Check for leaks from automobiles and heating fuel tanks. Clean up any spills using absorbent material like cat litter. Sweep up the material and put it in a sealed bag. Check with the local refuse facility for proper disposal.
- Clean up after your pets and limit the use of fertilizers and pesticides.

Report any spills, illegal dumping or suspicious activity to Illinois Environmental Protection Agency: www.epa.illinois.gov or (217) 782-3397.

- Many common household leaks are quick to find and easy to fix. Worn toilet flappers, dripping faucets, and leaking showerheads all are easily correctable and can save on your utility bill.
- Use a water-efficient showerhead.
- 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.
- Remember to look for the WaterSense label when purchasing plumbing products. WaterSense labeled products are independently certified to use at least 20 percent less water.

Visit www.epa.gov/watersense for more information.