

Fosterburg Water District
IL1195220
2021 Water Quality Report

We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Fosterburg Water District's source of water is the Illinois American Water Co. plant in Alton, their supply is obtained from the Mississippi River. A copy of the water source assessment is available upon request.

Table 1 represents the water quality data from Illinois American Water Company, while Table 2 represents water quality data from Fosterburg Water District. The Water District routinely monitors for constituents in your drinking water according to Federal and State laws. The attached tables show the results of our monitoring for the period of January 1st to December 31st, 2021. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

As you can see from the attached tables, our system had no water quality violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. Some constituents have been detected through our monitoring and testing program, however, the EPA has determined that your water is safe at these levels.

Other Facts about Your Drinking Water

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. Fosterburg Water District 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 <http://www.epa.gov/safewater/lead>.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amounts of certain contaminants in water provided by public water systems. Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contamination. 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 at (800) 426-4791.

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/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact Mark Voumard at 618-259-0935. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the Third Wednesday of each month at 7:30 p.m.

Sincerely,

Mark D Voumard
District Manager
State Certified Water Operator

**TABLE 1
2021 Water Quality Data**

IL AMERICAN WATER COMPANY-ALTON (1195150)

Parameter (unit of measurement) Typical Source State Regulated Chemicals	MCL	MCGL	Amount Detected	Range of Detects	Violation
<i>Inorganic Chemicals</i> <u>Nitrate</u> (As Nitrogen) (ppm) <i>Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.</i>	10	10	5	1.43 – 4.51	No
<u>Fluoride</u> (ppm) <i>Water additive which promotes strong teeth</i>	4.0	4.0	.6	.64 - .64	No
<u>Sodium</u> (ppm) <i>Erosion of naturally occurring deposits; Used as water softener.</i>	N/A	N/A	29	29.4 – 29.4	No
<u>Arsenic</u> (ppb) <i>Erosion of naturally occurring deposits; Run off from orchards; Run off from Glass and electronics</i>	10	0	2	2 – 2	No
<u>Atrazine</u> (ppb) <i>Run off herbicides used on row crops</i>	3	3	.4	0 - .4	No

Turbidity is a measure of the cloudiness of the water caused by suspended particles. 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.

Turbidity (Units)	Limit Treatment technique	Level Detected	Violation
<u>Highest single measurement</u> (NTU) (%0.3 NTU) Soil run off	1 NTU	.165 NTU	No
<u>Lowest monthly % meeting limit</u> Soil run off	.3 NTU	100%	No

Note: The IEPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of the data in the table above, though accurate, is more than one year old.

Violation Summary Table

We are happy to announce that no monitoring, reporting, treatment technique, maximum residual disinfectant level, or maximum contaminant level violations were recorded during 2021.

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.

In 2021, our PWS was sampled as part of the State of Illinois PFAS Statewide Investigation. Results from this sampling indicated PFAS were detected in our drinking water (above the health advisory level/below the health advisory level established by Illinois EPA. Follow up monitoring is being conducted. For more information about PFAS health advisories <https://www2.illinois.gov/epa/topics/water-quality/pfas/Pages/pfas-healthadvisory.aspx> UNR

Parameter	Year Sampled	Units	Health-Based Guidance Level	Highest Result	Range Detected	Typical Source
PerfluorooctaneSulfonic Acid (PFOS)	2021	ppt	14	3.20	0 to 3.20	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
Perfluorooctanoic Acid (PFOA)	2021	ppt	2	2.60	0 to 2.60	Manufactured chemical(s); used in household goods for stain, grease, heat and water resistance.
PerfluorohexanoicAcid (PFHxA)	2021	ppt	560,000	3.60	2.1 to 3.60	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.

2021 Source Water Assessment Summary

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. The Alton 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 Environmental Protection Agency (IEPA) has completed a source water assessment for the Alton system and a copy is available upon request by calling Sarah Boyd, Water Quality Supervisor at 618-874-2408. 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://www.epa.state.il.us/cgi-bin/wp/swap-fact-sheets.pl>.

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 include: - Microbial contaminants, Inorganic contaminants, Pesticides and herbicides, Organic chemical contaminants, and Radioactive contaminants

**TABLE 2
2021 Water Quality Data**

FOSTERBURG WATER DISTRICT (1195220)

Disinfection/Disinfectant By-Products		MCLG	MCL	Highest Level	Range of Detects	Violation
TTHM'S (Total Trihalomethane) (ppb) By-product of drinking water disinfection		N/A	80	53	33.1-117	No
Total Haloacetic Acids (HAA ₅) (ppb) By-product of drinking water disinfection		N/A	60	43	11.8-126.2	No
Chloramines Water additive used to control microbes		MRDLG 4	MRDL 4	2.8	2 - 3	No

Lead and Copper	Date	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violations
Copper	2020	1.3	1.3	.123	0	ppm	No
Lead	2020	0	15	2	0	ppb	No

Copper: Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems

Lead: Corrosion of household plumbing systems; Erosions of natural deposits

Unregulated Contaminant Monitoring Rule (UCMR4)⁴

Substance (units)	Year Sampled	Amount Detected (Average)	Range of Detections	Typical Source
Manganese* (ppb)	2020	1.49	.99 - 1.21	Naturally occurring element; commercially available in combination with other elements and minerals; used in steel production, fertilizer, batteries and fireworks; drinking water and wastewater treatment
Total Haloacetic Acids 9 – UCMR4 (ppb)	2020	20.5	2.2 – 39.1	By-product of drinking water disinfection.

*Manganese has a secondary MCL of 150 ppb

4 Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. A maximum contaminant level (MCL) for these substances has not been established by either state or federal regulations, nor has mandatory health effects language.

Note: The IEPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of the data in the table above, though accurate, is more than one year old.

Footnotes for Water Quality Data Tables

Note: The state requires monitoring of certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Therefore, some of this data maybe more than one year old.

Units of Measurement

ppm - Parts per million or milligrams per liter

ppb - Parts per billion or micrograms per liter

%<0.5 NTU – percent samples less than 0.5 NTU

% pos/mo – percent positive samples per month

MRDLG – Maximum Residual Disinfectant Level Goal

S – Single sample

pCi/l - Picocuries per liter, used to measure radioactivity

AL – action level

NTU – Nephelometric Turbidity units, used to measure cloudiness in water

N/D – not detected at testing limits

MRDL - Maximum Residual Disinfectant Level

Definition Of Terms

TURBIDITY:

Turbidity is a measure of the cloudiness of the water. We monitor it because it is good indicator of water quality and the effectiveness of our filtration system and disinfectants.

Total Organic Carbon: The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violations section.

NITRATE (AS NITROGEN):

The value in the **level found column** is the maximum detected for the year. 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 a short period of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

SODIUM:

There is not a state or federal MCL for sodium. Monitoring is required to provide information and health officials that are concerned about sodium intake due to dietary precautions. If you are on sodium – restricted diet, you should consult a physician about this level of sodium in the water.

FLUORIDE:

Fluoride is added to the water supply to help promote strong teeth. The Illinois Department of Public Health recommends an optimal fluoride range of 0.9 mg/l (ppm) to 1.2 mg/l (ppm).

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 CONTAMINANT LEVEL (MCL):

This is 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.

LEVEL FOUND:

Unless otherwise noted with an asterisk (*), this column represents an average of sample result data collected during the CCR calendar year. In some cases, it may represent a single sample if only one sample was collected.

RANGE OF DETECTIONS:

This column represents the range of individual sample results, from the lowest to highest that were collected during the CCR calendar year.

ACTION LEVEL (AL):

The concentration of a contaminant, which if exceeded, triggers treatment or other requirements, which a water system must follow.

TREATMENT TECHNIQUE (TT):

A required process intended to reduce the level of a contaminant in drinking water.

N/A: not applicable

**2021
Violation Summary**

Violation Description: There were no water quality violations recorded during 2021.
