

# 2023 WATER QUALITY REPORT FOR THE IOWA CITY WATER DIVISION

This report contains important information regarding the water quality in our water system. The source of our water is surface water. Our water quality testing shows the following results:

Contaminant	MCL - (MCLG)	Compliance		Date	Violation (Yes/No)	Source
		Type	Value & (Range)			
Total Trihalomethanes (ppb) [TTHM]	80	LRAA	55 (27 - 55)	2023	No	By-products of drinking water chlorination
Total Haloacetic Acids (ppb) [HAA5]	60	LRAA	13 (9 - 13)	2023	No	By-products of drinking water disinfection
Lead (ppb)	AL=15 (0)	90th	4.00 (ND - 12)	2023	No	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm)	AL=1.3 (1.3)	90th	0.02 (ND - 0.02)	2023	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
<b>950 - DISTRIBUTION SYSTEM</b>						
Chlorine (ppm)	MRDL=4.0 MRDLG=4.0	RAA	0.98 (0.92 - 1.06)	2023	No	Water additive used to control microbes
Total Coliform Bacteria	<5% of monthly samples TC+	RTCR	2 sample(s) TC+ / EC-	06-15-2023 06-26-2023	No	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other waterborne pathogens may be present, or that a potential pathway exists through which contamination may enter the drinking water.
Dalapon (ppb)	200 (200)	AVG (N = 7)	0.6 (0.3 - 0.8)	2023	No	Runoff from herbicide used on rights of way
<b>03 - S/EP IA RIVER, J WELLS, S WELLS, C WELLS</b>						
Sodium (ppm)	N/A	AVG (N = 6)	21 (16 - 25)	2023	No	Erosion of natural deposits; Added to water during treatment process
Nitrate [as Nitrogen] (ppm)	10 (10)	AVG (N = 365)	1.6 (0.2 - 4.3)	2023	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Turbidity* (NTU)	TT	AVG (N = 365)	0.03 (0.02 - 0.13)	2023	No	Soil runoff
Total Organic Carbon (% removed)	TT	AVG (N = 12)	42% (30 - 61%)	2023	No	Naturally present in the environment
Fluoride (ppm)	4 (4)	SGL	0.83 (0.57 - 0.83)	2023	No	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories
2,4-D (ppm)	0.07 (0.07)	SGL	ND	03-20-23	No	Runoff from herbicide used on row crops
Manganese (ppm)	SMCL = 0.05	AVG (N = 365)	0.01 (ND - 0.02)	2023	No	Naturally present in the environment
1-Butanol† (ppm)	UCMR4 MRL = 0.002	SGL	0.015	11-6-2018	No	It is used in the production of other substances
Lithium† (ppb)	UCMR5 MRL = 9	AVG (N = 4)	18 (ND - 47)	2023	No	It is used in the production of other substances
PFAS†** (ppb)	UCMR5 MRL = 0.002 - 0.02	SGL (N = 116)	ND	2023	No	It is used in the production of other substances. This row represents the sum of the PFOA and PFOS compound concentrations only

Note: Contaminants with dates indicate results from the most recent testing done in accordance with regulations.

## DEFINITIONS

- AL – Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- Alkalinity – A measure of how much acid can be added to a liquid without causing a large change in pH.
- AVG – Average result of all samples taken for the parameter within the calendar year.
- Hardness – Amount of calcium and magnesium ions in solution.
- LRAA – Locational Running Annual Average
- MCL – Maximum Contaminant Level – 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.
- MCLG – Maximum Contaminant Level Goal – 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.
- mg/L – milligrams per liter
- MRDL – Maximum Residual Disinfectant Level – 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.
- MRDLG – Maximum Residual Disinfectant Level Goal – 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 contaminants.
- MRL – Minimum Reporting Level – The minimum reportable concentration based on the analysis method
- N – Number of samples used to calculate the average
- N/A – Not applicable
- ND – Not detected
- NTU – Nephelometric Turbidity Units – Turbidity is measure of clarity, the lower the number the clearer the sample. For comparison the Iowa River typically has a turbidity value between 10 to 1,500+ NTU.
- ppt – parts per trillion | 1 ppt = 0.000001 ppm
- ppb – parts per billion | 1 ppb = 0.001 ppm
- ppm – parts per million
- pCi/L – picocuries per liter
- RAA – Running Annual Average
- RTCR – Revised Total Coliform Rule
- SGL – Single Sample Result
- SMCL – Secondary maximum contaminant level – Guidelines to assist public water system manage drinking water aesthetics
- TC+ / EC- – Total Coliform Positive / E. coli Negative – Coliforms are an easy to culture bacteria used as an indicator to infer if other organisms may be present in a sample. When a sample is TC+ / EC- additional samples are obtained from the water system and analyzed to ensure the system is free of bacteria. The system draws 70 bacteriological samples each month.
- TDS – Total Dissolved Solids – The total filterable dissolved solids present in a fluid
- TT – Treatment Technique – A required process intended to reduce the level of a contaminant in drinking water.
- UCMR – Unregulated Contaminant Monitoring Rule – Process the EPA uses to monitor unregulated drinking water contaminants to determine if regulations are needed and if needed what MCL is feasible.

## GENERAL INFORMATION

General water quality parameters for the Iowa City drinking water are:

pH: 9.25 ± 0.10
TDS: 150 - 200 ppm
Alkalinity: 40 - 70 mg/L as CaCO <sub>3</sub> 2.3 - 4.1 grains per gallon
Total Hardness: 85 - 130 mg/L as CaCO <sub>3</sub> 5.0 - 7.6 grains per gallon

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate the water poses a health risk. More information about contaminants or potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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 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 Iowa City Water Division is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When you have not used water in your home 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 at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead), or call the Iowa City Water Division to request a free lead test (319-356-5160). The City's Lead Reduction Program information is available at: [www.icgov.org/water](http://www.icgov.org/water)

### ADDITIONAL HEALTH INFORMATION

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.

Drinking water health advisory information is available on the Iowa Department of Natural Resources website at: [www.iowadnr.gov/Environmental-Protection/Water-Quality/Drinking-Water-Compliance/Drinking-Water-Health-Advisories](http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Drinking-Water-Compliance/Drinking-Water-Health-Advisories)

### SOURCE WATER ASSESSMENT INFORMATION

This water supply obtains its water from the sand and gravel of the Alluvial aquifer. The Alluvial aquifer was determined to be highly susceptible to contamination because the characteristics of the aquifer and overlying materials provide little protection from contamination at the land surface. The Alluvial wells will be highly susceptible to surface contaminants such as leaking underground storage tanks, contaminant spills, and excess fertilizer application. A detailed evaluation of your source water was completed by the Iowa Department of Natural Resources and is available at [programs.iowadnr.gov/sourcewater](http://programs.iowadnr.gov/sourcewater).

This water supply obtains water from one or more surface waters. Surface water sources are susceptible to sources of contamination within the drainage basin.

Surface Water Name	Susceptibility
Iowa River (Sand Pit)	high
Iowa River	high

### OTHER INFORMATION

\*Turbidity is an indicator of treatment filter performance and is regulated as a treatment technique.

†The contaminant is currently unregulated by a MCL and is being monitored and reported as part of a UCMR.

\*\*The contaminant is a group of thousands of compounds known as per- or polyfluoroalkyl substances (PFAS). Four PFAS compounds have current health advisory levels and six PFAS compounds have proposed regulatory limits. The affected PFAS compounds are PFOA, PFOS, HFPO-NA (GenX), PFBS, PFNA, and PFHxS. All six of these PFAS compounds were not detected (ND) in the Iowa City finished drinking water. Three other PFAS compounds were detected – PFBA, PFPeA, and PFHxA at 3.9, 2.1, and 1.9 parts per trillion (ppt), respectively. Iowa City samples annually for PFAS. For more information about PFAS, please visit: Health advisory information: [www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos](http://www.epa.gov/sdwa/drinking-water-health-advisories-pfoa-and-pfos)

Proposed regulatory limits: [www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas](http://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas)

### CONTACT INFORMATION

#### Public Meeting Information

We encourage our customers to attend and participate in the meetings about our water utility. The Iowa City Council meets the first and third Tuesday of each month at 6 p.m. in:

Emma J. Harvat Hall

City Hall

410 E Washington Street

Iowa City, IA 52240-1826

For Meeting information call (319) 356-5000

For questions regarding this information or how you can get involved in decisions regarding the water system, please contact Iowa City Water Division at 319-356-5160.