

# BEST TASTING WATER

IN IOWA

2010 • 2012 • 2022

2022

## Water Quality Report



Cedar Rapids water was recently named the Best Tasting Water in Iowa! A lot of work goes into that great taste. We are working nonstop for every drop, upstream and downstream, in our labs and around the city, ensuring our water is of the highest quality. Our staff members are committed to providing safe, clean, and great tasting drinking water now and into the future. Find out more about our water quality efforts inside.

[CityofCR.com/WaterQuality](http://CityofCR.com/WaterQuality)

*Serving the City of Cedar Rapids, the City of Robins, the Glenbrook Cove Subdivision of Marion and the Poweshiek Water Association.*



# WORKING NONSTOP FOR EVERY DROP

Keeping the community supplied with clean, safe, great-tasting drinking water is something that the staff at the Cedar Rapids Water Division take very seriously. Process monitoring at the treatment plant is done around the clock. Water meter shop and water main repair workers are on call 365 days a year, ready to respond to calls for possible water leaks and make necessary repairs to ensure a safe supply to our customers. We are proud to work nonstop for every drop.

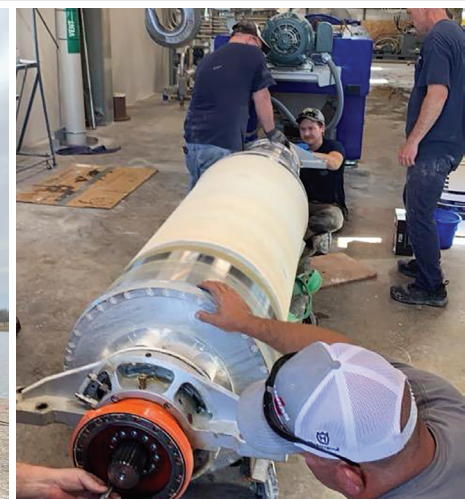
## CONTINUED WATER MONITORING AT A GLANCE

Our drinking water is highly monitored and tested, day and night throughout the year, for the production of our treated water. We monitor from the water's starting point in the Cedar River, to the time it reaches our distribution system and makes its way to our customers. The Cedar River influences the wells where we draw our water, and although no tests are required at the river level because this is not our source water, we test anyway, because fluctuations in the river impact concentrations in our wells.

Providing drinking water to the public is a highly regulated process, with regulations set by the Environmental Protection Agency and the Iowa Department of Natural Resources. We take our mission seriously and are very proud to provide the Cedar Rapids area with drinking water that is safe, high quality, and the best tasting water in Iowa!

## ANNUAL MONITORING REQUIREMENTS AND BEYOND

SAMPLE SOURCE	NUMBER OF TESTS REQUIRED	NUMBER OF TESTS PERFORMED BY CITY
THE CEDAR RIVER	None	1,200
RAW WATER	4,000	11,000
TREATED WATER	3.2 million	3.25 million
WATER DISTRIBUTED TO CUSTOMERS	4,000	12,000





**WORKING UPSTREAM AND DOWNSTREAM**

Protecting the quality of our drinking water is an important job, and our efforts begin at the source — the Cedar River Watershed. The City of Cedar Rapids has formed many partnerships to help reduce pollutants from urban and agricultural areas that can end up in the Cedar River, and eventually, our drinking water supply.

Recently, the City began working with 11 partners on the Cedar River Source Water Partnership ([CityofCR.com/Watershed](http://CityofCR.com/Watershed)). The partnership provides technical and financial assistance to farmers to make smart decisions on their land, reducing pollutants such as nitrate from contaminating the Cedar River.

Thanks to our outreach efforts, more farmers are beginning to use practices such as cover crops and underground treatment systems that improve the water quality of the Cedar River. In town, homeowners and businesses can also help to reduce pollutants in the Cedar River by implementing stormwater Best Management Practices (BMPs). The City offers financial assistance for urban property owners to install rain gardens, rain barrels, and other water quality practices. Visit [CityofCR.com/Stormwater](http://CityofCR.com/Stormwater) to learn more about how you can improve the water quality in your neighborhood.

These efforts are part of the City's One Water approach to managing our water resources. Water is a valuable resource, and we are working nonstop for every drop — from the river, to the tap, and even what we flush down the drain.

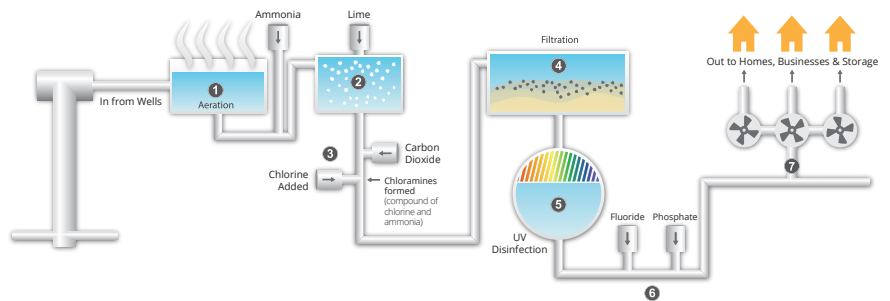
# How Your Water is Treated

## 1 Aeration

Once water arrives at the City's treatment facilities, it undergoes a process called aeration. During this process, the raw/untreated water falls down a series of trays. These trays help open the water up so gases can be exchanged and removed. This includes the removal of undesirable gases like radon. Aeration is similar to the natural process that happens when water in a stream flows through rapids or over waterfalls.

## 2 Softening

Lime chemical is added to soften the water. This process reduces minerals that make water "hard," and water pH increases in this process. Hardness in water means you need to use more soap and detergents. Hard water also causes buildup in water heaters and boilers. Hard water can interfere with industrial processes and sometimes gives water an unappealing taste and odor. Softening water can limit those challenges. After lime chemical is added, residual materials are extracted and applied to farmland as a soil conditioner. The residuals can also be used as fill in approved land-reclamation projects.



## 3 Recarbonation and Chlorination

Water pH is lowered through the addition of carbon dioxide. Chlorine is added to disinfect the water. This process helps kill disease-causing organisms, making our water safer. During this step, a trace amount of ammonia is also added to further aid in disinfection.

## 6 Fluoridation and Phosphate Addition

Fluoride promotes children's dental health. Phosphate is used to stabilize water and lessen the possibility that lead and copper will leach out of pipes and fixtures into tap water.

## 4 Filtration

Water passes through a sand and gravel filter bed, removing any remaining suspended matter.

## 7 Distribution

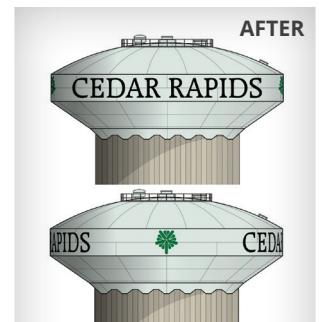
Finished water is pumped directly into the distribution system. The distribution system includes water storage tanks, booster stations, and more than 700 miles of water mains. Water stored in elevated tanks or pumped through booster stations helps stabilize pressure in the distribution system and serves as an emergency reserve for fire protection.

## 5 UV Disinfection

Water enters a ultraviolet (UV) light disinfection system in this step. The UV system uses special lamps to instantly damage the genetic material of any microorganisms in the water. The process eliminates the ability for microorganisms to reproduce and cause infection. Then, water passes through a contact tank. Time spent in this tank allows the chlorine compound created in Step 3 to complete its disinfection process.

## Boyson Water Tower Resurfacing Update

As part of our ongoing infrastructure maintenance, one of the City's water storage tanks will be refurbished in the fall of 2023. Our 3 million gallon capacity Boyson Water Tower will undergo cleaning and resurfacing.

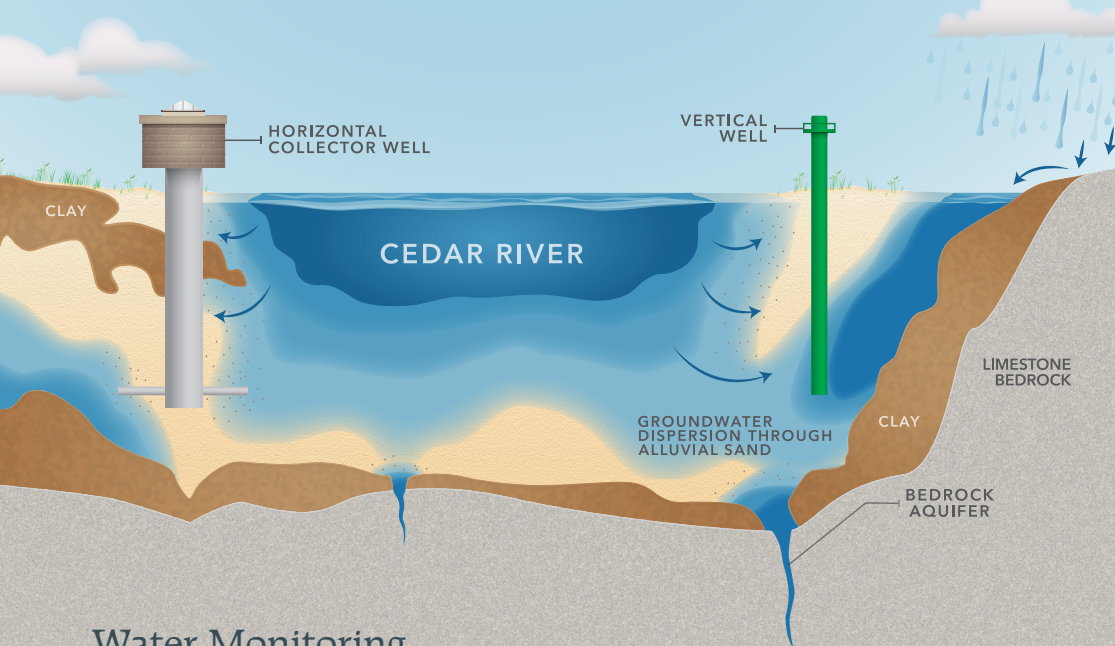


# WHERE OUR WATER COMES FROM

The City of Cedar Rapids obtains its drinking water supplies from wells constructed in sand and gravel deposits along the Cedar River. Those deposits form an underground, water-bearing layer called an alluvial aquifer. Because of continuous pumping of the City's wells, most of the water in the aquifer is pulled from the river.

The rest of the water is supplied as water percolates up from a deeper bedrock aquifer, or down from the top of the ground.

As the wells perform their work, your drinking water benefits from natural filtration through sand in the riverbank. This filtration has proven to be a beneficial pretreatment to water before it reaches the City's conventional lime-softening facilities.



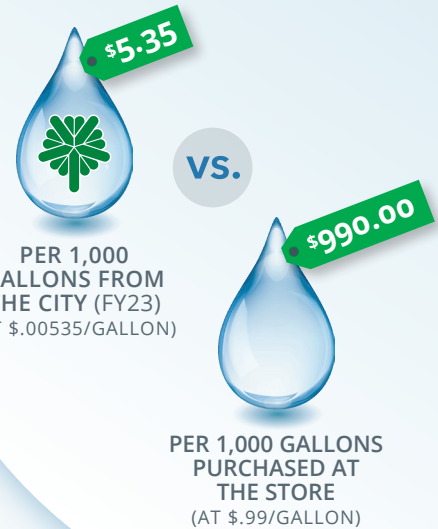
## Water Monitoring

The City of Cedar Rapids has a continued collaboration with the United States Geological Survey (USGS) in monitoring water quality and occurrence of contaminants in the Cedar River, its tributaries, and the ground water aquifer that supplies water to our treatment plants. Data is also being collected for ground water modeling for use in placement of new wells and prediction of water supply capacity. Results of these continued water monitoring efforts show that levels of potential drinking water contaminants remain well below levels of concern for human health.

## The "One Water" Approach

Cedar Rapids staff members are committed to working around the clock to ensure that we have the cleanest, safest, and best-tasting water possible. We take a "One Water" approach, which means all forms of water are important, including stormwater, drinking water, wastewater, industrial water, watersheds, and more. We also believe that everyone is entitled to clean, safe water, and we continue to pursue water equity.

Cedar Rapids residents enjoy water rates that are among the lowest in the state!



## WHAT'S THE VALUE of Water?

**Invaluable. Reliable.** Water — it is essential for everything we do in life. We need water to make a cup of coffee, keep things clean, fight fires, build bridges, and swim on a summer day. From agriculture to manufacturing, most sectors of our economy rely on water.

Water drives economic growth and competitiveness. Water protects public health. Water revitalizes neighborhoods and supports community vitality. It sustains our environment and makes us more resilient in the face of climate change. Water is life.



LEARN MORE AT [www.TheValueOfWater.org](http://www.TheValueOfWater.org)





# KEEPING AN EYE ON PFAS

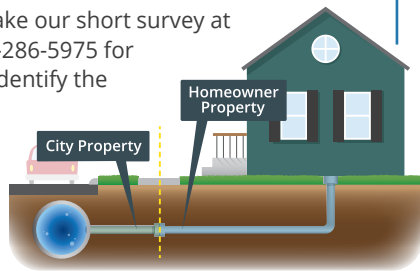
Per- and Polyfluoroalkyl substances (PFAS) are a group of substances that have been used in a variety of industries around the globe since the 1940s. The chemicals are very persistent in the environment and in the human body, meaning they don't break down and can accumulate over time. Due to their persistence and wide use in nonstick surfaces, waterproofing, grease-resistant coatings, stain-resistant coatings, cosmetics, and firefighting foams over the last several decades, the substances are now making their way into bodies of water and groundwater sources and becoming a contaminate of concern for the drinking water industry.

Primary human exposure is from the sources mentioned above, and monitoring is being performed by the Cedar Rapids Water Division (CRWD) to watch for detection in the groundwater source wells and the drinking water supply. The Environmental Protection Agency (EPA) is performing research and has proposed Maximum Contaminant Levels for 6 specific compounds. The CRWD has not had any detections in its treated drinking water thus far for these compounds. Ongoing testing of 29 compounds will be performed quarterly over the next year as we participate in the EPA's Unregulated Contaminant Monitoring Rule (UCMR) program's fifth round of sampling.

For more on PFAS, visit [CityofCR.com/PFAS](http://CityofCR.com/PFAS).

## THE CITY NEEDS YOUR HELP!

Because public safety is our top priority, the Cedar Rapids Water Division (CRWD) is updating its records on individual service lines, which are the plumbing between the City's distribution pipes and the water meter on the customer's end. Updating records is a high priority and a first step toward determining how precise our monitoring program can be. Help the CRWD in its efforts to remove lead service lines from the water system. Please take our short survey at [CityofCR.com/Inventory](http://CityofCR.com/Inventory), or call 319-286-5975 for detailed instructions on how to help identify the private service line material as it enters your premise, or if there has already been or will be a replacement to your private-side service line.



## Stormwater Cost-Share Program

The Stormwater Cost-Share Program reimburses 50% of costs (up to \$2,000) for the installation of features, such as rain gardens, that improve the quality and decrease the quantity of stormwater. Private property owners subject to the Stormwater Utility Fee are eligible to participate in the program. Learn more at [CityofCR.com/Stormwater](http://CityofCR.com/Stormwater).

## Educational Information

### NITRATE

Nitrate is a dissolved form of nitrogen found in fertilizers and sewage byproducts that may leach into groundwater and other water sources. Nitrates occur naturally in some waters. Over time, nitrates can accumulate in aquifers and contaminate groundwater.

Nitrate in drinking water at levels above 10 ppm is a potential health risk for infants 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, ask for advice from your health care provider.

### LEAD

Our drinking water contains little or no lead when it leaves our treatment plants. However, lead can leach into the water during overnight contact with the lead solder and brass faucets in some homes. Because of that, the Cedar Rapids Water Division (CRWD) collects and analyzes special samples quarterly from area homes to monitor the distribution system. Our tests show that most homes are at or well below the 15 parts per billion (ppb) — or 15 micrograms per liter of water — treatment technique standard set by the Environmental Protection Agency (EPA) for annual compliance monitoring.

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 CRWD 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 and 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 (1-800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

The following state-approved laboratories can test your water for lead:

**State Hygienic Laboratory:** Oakdale, IA | 800-421-4692

**TestAmerica:** Cedar Falls, IA | 319-277-2401

**Keystone Labs:** Newton, IA | 641-792-8451

### AT-RISK POPULATIONS

It's important to be aware that some people may be more vulnerable than the general population to contaminants in drinking water. Immuno-compromised persons — those undergoing cancer chemo-therapy or organ transplants, some elderly or infants and people with HIV/AIDS or other immune system disorders — can be particularly at risk from infections. We ask anyone that may be at risk to seek advice about drinking water from their health care providers. Guidelines from the EPA and Centers for Disease Control on appropriate steps to lessen the risk of infection by microbial contaminants and/or Cryptosporidium are available from the National Safe Drinking Water Hotline at 1-800-426-4791.

### QUESTIONS?

If you have questions or concerns about our water quality or this report, we invite you to attend one of two upcoming public meetings:

**Saturday, June 3**  
7:30 a.m. – Noon,  
Downtown Farmers' Market  
Resident Appreciation Day

**Thursday, June 8**  
4 – 5 p.m.,  
Water Admin. Building,  
1111 Shaver Rd. NE

# Water Quality Findings

This table summarizes required water quality monitoring results for regulated parameters that were detected in the 2022 calendar year. A comprehensive report of all water quality testing is available from the Water Division.

WATER TREATMENT PLANTS - FINISHED WATER															
INORGANIC CHEMICALS					J AVE. PLANT		NW PLANT		POSSIBLE SOURCES OF CONTAMINANT						
	UNITS	MCL	MCLG	VIOLATION	RANGE	REPORTED	RANGE	REPORTED							
Arsenic	µg/L	10	0	No	ND - 0.8	0.7	ND - 0.8	0.4	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes						
Nitrate	mg/L	10	10	No	0.5 - 4.5	4.5	0.8 - 7.9	7.9	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits						
Nitrite	mg/L	1	1	No	ND - 0.2	0.2	ND - 0.7	0.7	Runoff from fertilizer use; Leaching from septic tanks, Sewage; Erosion of natural deposits						
Sodium	mg/L	NA	NA	No	NA	14	NA	13	Erosion of natural deposits; Added to water during treatment process						
Fluoride	mg/L	4	4	No	0.1 - 0.8	0.8	0.1 - 0.8	0.8	Water additive which promotes strong teeth; Erosion of natural deposits; Discharge from fertilizer and aluminum factories.						
ORGANIC CHEMICALS					RANGE	REPORTED	RANGE	REPORTED							
Atrazine	µg/L	3	3	No	ND - 0.4	0.1	ND - 0.4	0.1	Runoff from herbicide used on row crops						
Dalapon	µg/L	200	200	No	NA	0.2	NA	ND	Runoff from herbicide used on row crops						
TREATMENT TECHNIQUE INDICATORS					RANGE	REPORTED	RANGE	REPORTED							
Total Organic Carbon	Removal Credits	TT	NA	No	1.1 - 3.0	1.8	1.6 - 3.5	1.8	Naturally present in the environment						
					Running Annual Average TOC Credits must be > 1.0										
Turbidity	NTU	TT	NA	No	0.01 - 0.30	0.30	0.02 - 0.24	0.24	Soil runoff						
					% > 0.3 NTU		% > 0.3 NTU								
					0.00		0.00								
UNREGULATED AND SECONDARY CHEMICALS															
INORGANIC CHEMICALS				J AVE. PLANT		NW PLANT		POSSIBLE SOURCES OF CONTAMINANT							
	UNITS	MCL	MCLG	RANGE	AVG	RANGE	AVG								
Chloride	mg/L	NA	250	29.8 - 36.8	33.0	27.0 - 34.1	30.6	Erosion of natural deposits, run-off							
Copper	mg/L	NA	1.0	ND - 0.03	0.00	ND - 0.01	0.01	Corrosion of household plumbing, erosion of natural deposits							
Manganese	µg/L	NA	50	ND - 30.0	13.0	ND - 5.4	0.4	Corrosion of household plumbing, erosion of natural deposits							
Sulfate	mg/L	NA	250	22.0 - 45.0	29.8	22.0 - 47.0	29.9	Erosion of natural deposits							
Zinc	mg/L	NA	5	0.1 - 0.3	0.2	0.2 - 0.3	0.2	Corrosion of household plumbing, erosion of natural deposits							
ORGANIC CHEMICALS				RANGE	AVG	RANGE	AVG								
Chloroform	µg/L	NA	70	0.8 - 1.2	1.0	1.3 - 1.7	1.6	By-product of drinking water disinfection							
Bromodichloromethane	µg/L	NA	0	ND	ND	ND - 0.7	0.3								
Dibromoacetic Acid	µg/L	NA	0	ND - 2.0	0.5	ND	ND								
Dichloroacetic Acid	µg/L	NA	0	ND - 2.0	1.5	ND - 2.0	1.5								
Metolachlor	µg/L	NA	NA	ND - 0.5	0.2	ND - 0.4	0.30	Run-off from fertilizer used on row crops							
RADIONUCLIDES				RANGE	REPORTED	RANGE	REPORTED								
Radon	pCi/L	NA	NA	34 - 57	55	23 - 47	39	Erosion of natural deposits							
DISTRIBUTION SYSTEM MONITORING															
LEAD AND COPPER RULE	UNITS	ACTION LEVEL (AL)	MCLG	VIOLATION	RANGE	90TH PERCENTILE	95TH PERCENTILE	SAMPLES EXCEEDING AL	POSSIBLE SOURCES OF CONTAMINANT						
Lead	µg/L	15	0	NO	ND - 11.8	2.8	3.6	0	Corrosion of household plumbing systems; erosion of natural deposits						
Copper	mg/L	1.3	1.3	NO	0.002 - 0.102	0.066	0.074	0							
REVISED TOTAL COLIFORM RULE				JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Total # Samples/Month				108	131	135	128	121	129	131	130	131	140	133	132
# Positive Coliform Samples/Month				0	0	0	0	0	0	1	1	0	0	0	1
Level 1 Assessment Required				NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
Meets Monthly MCL of <5% Positive Coliform/Month				Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
INORGANIC CHEMICALS			UNITS	MRDL	MRDLG	VIOLATION	RANGE	REPORTED	SOURCE OF CHEMICAL						
Nitrite			mg/L	1	1	No	ND - 0.2	0.2	By-product of drinking water disinfection						
DISINFECTANT & DISINFECTION BY-PRODUCTS						DISTRIBUTION SYSTEM									
	UNITS	MRDL	MRDLG	VIOLATION	RANGE	REPORTED									
Total Chlorine Residual	mg/L	4	4	NO	1.4 - 3.9	3.3	Water additive used to control microbial growth								
	Units	MCL	MCLG	VIOLATION	RANGE	REPORTED									
Total Trihalomethanes (TTHM)	µg/L	80	NA	NO	ND - 2.6	2.4*	By-product of drinking water disinfection								

# Source Water

**Source Water Assessment Information:** This water supply obtains its water from the sand and gravel of the Alluvial aquifer of the Cedar River. The Alluvial aquifer was determined to be highly susceptible to contamination because the aquifer characteristics and the 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 the source water supply was completed by the IDNR, and is available by contacting the public water supply at 319-286-5975. *Information about work being done to help minimize contamination of the source water supply can be found at [CityofCR.com/MCPPP](http://CityofCR.com/MCPPP).*

	Arsenic µg/L	Total Coliform cfu/100ml	E.coli cfu/100ml	Lead µg/L	Copper µg/L	Zinc µg/L	Manganese µg/L	Iron µg/L	Sodium mg/L	Nitrate mg/L	Radon pCi/L	TOC mg/L
2018 Annual Average	0.84	35	<1	0.05	4.2	2.2	171	49.4	10.0	3.6	275	2.27
2019 Annual Average	0.86	55	<1	ND	6.6	2.7	120	42.7	9.4	3.6	245	2.87
2020 Annual Average	1.40	2	<1	ND	7.1	0.9	120	289.3	10.2	3.3	297	1.57
2021 Annual Average	2.69	4	<1	0.01	9.5	3.2	479	310.0	13.0	2.1	295	1.47
2022 Annual Average	1.00	4	<1	0.01	7.8	3.8	310	410.0	12.8	3.2	266	2.38

## ACRONYMS

<b>AVG:</b> Average	<b>MCL:</b> Maximum Contaminant Level
<b>ND:</b> Not Detected	<b>MCLG:</b> Maximum Contaminant Level Goal
<b>MRDL:</b> Maximum Residual Disinfectant Level	<b>NA:</b> Not Applicable
<b>NR:</b> Not Regulated	<b>NTU:</b> Nephelometric Turbidity Unit
<b>mg/L:</b> Milligrams per liter or parts per million	<b>MRDLG:</b> Maximum Residual Disinfection Level Goal
<b>µg/L:</b> Micrograms per liter or parts per billion	<b>HLRAA:</b> Highest Locational Running Annual Average
<b>pCi/L:</b> Picocuries per liter	<b>RAA:</b> Running Annual Average
<b>cfu/mL:</b> Colony-forming unit per milliliter	

## The following is an important message from the Environmental Protection Agency:

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. That's because as the water we draw from — lakes, rivers, streams, ponds, reservoirs, springs and wells — travels over the surface of the land or through the ground, it picks up naturally occurring minerals and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. 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 or visiting the website at [www.epa.gov/ogwdw](http://www.epa.gov/ogwdw). Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses and parasites, which can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

## Frequently Asked Questions

### What is the fluoride concentration, and why is it added?

Fluoride is added during the treatment process to help prevent dental cavities. The optimal concentration is maintained at 0.7 parts per million (ppm) with a range of 0.6-0.9 ppm as recommended by the U.S. Department of Health and Human Services.

### My toilet tank and inside of my dishwasher are stained dark brown to black. Is my water safe to drink?

The dark staining is likely due to the corrosion-control chemical added during treatment. Its purpose is to lay a protective coating on the insides of pipes so water never comes in contact with the pipe, thereby reducing the risk of dissolving lead or copper into the drinking water. It has been tested extensively and no health or safety concerns have been identified.

### My water throughout the entire house tastes and smells musty or stale.

Sometimes in low-use areas or dead-end main areas, the water does not get circulated as it should. Where this is the case, the distribution crew can be notified to flush hydrants in the area to help bring in fresh water.

### The water is cloudy or milky. Does this mean it is unsafe?

Milky, cloudy, or white water, especially if it clears from the bottom up when put in a glass, is an indication that air has gotten into the plumbing. Air in drinking water is not harmful. Usually a thorough flush of two or three cold water taps at the same time (running multiple faucets for a few minutes) can help release the trapped air. If this does not work, staff can be notified to flush the water mains in the area.

### Why is there slimy pink or orange stuff in my water or on a surface near water?

This is a common occurrence, stemming from an airborne organism that collects on moist surfaces and forms growing colonies, usually around drains, toilets, sink fixtures, pet water dishes, showers, and shower curtains. This substance does not pose any additional health risks, given that it is already found in the air we breathe. The best way to reduce the growth of these organisms is to use cleaners that contain bleach.

### Why is my household water filter brown?

Due to the age of the Cedar Rapids water system, the Iowa Department of Natural Resources requires the Cedar Rapids Water Division (CRWD) to have a corrosion control process. This is a chemical addition that prevents the leaching of lead, copper, and other metals from water pipes and fixtures. Zinc-orthophosphate is continuously added in very low doses to form a protective coating on the inside of pipes, service lines, and household plumbing. This coating keeps lead and copper levels low. However, this process can also turn filters brown and cause filters to last a shorter length of time than advertised. CRWD treats water with a softening process, eliminating the need for water softeners. We also meet or exceed all state and federal regulations, which eliminates many reasons to use a home filtration system.

### What should I expect if my water is shut off due to a water main break?

Water main breaks are often indicated by a lack of water at the tap or water bubbling to the surface of neighborhood streets. This may prompt a water service disruption to your home or business.

Repair crews attempt to reach all homes, businesses, and apartments prior to shutting off water, except under emergency situations. The crews leave an information sheet (door hanger) at the property which explains what to do if water is shut off. It generally takes repair crews 8-12 hours to fix a break and restore water service. If air or particles are coming out of your drinking tap, run water for several minutes to flush the line.

If you receive a precautionary boil advisory notice, follow these steps before consuming tap water:

- 1) Bring water to a boil
- 2) Let water boil rapidly for at least one minute
- 3) Allow water to completely cool before consuming
- 4) Check City website for advisory status updates, or call Water Customer Service at 319-286-5900

If precautionary advisories are in place, bacteria testing will be done. In most cases, it takes two days for a bacterial contamination sample to return. If the sample shows no contamination in the water, another information sheet is issued, indicating an All Clear. Information will be posted to the City's website ([CityofCR.com](http://CityofCR.com)) if a precautionary boil advisory notice is issued.

# 2022 WATER REPORT SHOWS 100% Compliance

**BEST  
TASTING  
WATER**  
2010 • 2012 • 2022

The Water division achieved 100% compliance with the Iowa Department of Natural Resources' water quality expectations in 2022. This marks the fifth consecutive year the division earned this distinction. Additionally, the Water Pollution Control Facility (WPC) must meet 3,865 points of compliance toward its water discharge permit each year. In 2022, WPC became eligible for the North American Clean Water Agency (NACWA) Silver Peak Performance Award for its exceptional compliance. Cedar Rapids residents can be proud of the exceptional standards upheld by their Utilities Department every day.

## QUESTIONS?

If you have questions or concerns about our water quality or this report, please contact Water Division Customer Service. We are happy to help identify issues and resolve your concerns.

**CALL:**  
319-286-5900

**EMAIL:**  
watermail@cedar-rapids.org

## Glossary

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

**Arsenic:** The EPA recently lowered the arsenic Maximum Contaminant Level (MCL) to 10 ppb. Trace amounts of arsenic are occasionally detected in your drinking water at levels well below this more stringent standard. Arsenic is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

**Coliform:** A bacteria originating in the digestive system of mammals. Its presence in water alerts lab technicians that disease-causing agents may be present.

**Colony-forming unit:** Where a colony of microbes grow on a petri dish, form one single microbe.

**Compliance:** Following all rules and regulations defined in the Safe Drinking Water Act and maintaining water quality below MCLs.

**Contaminant:** One of a variety of natural or man-made physical, chemical, biological or radiological substances whose presence in public water systems may cause adverse health effects to consumers.

**Detection:** The positive identification of the presence of a particular contaminant. Detection of a contaminant does not necessarily represent a serious health risk to consumers if the concentration is below the MCL.

**Disinfection:** Killing the larger portion of microorganisms in water, with the probability that the disinfecting agent kills all disease-causing bacteria.

**Drought:** A period of unusually persistent dry weather that persists long enough to cause serious problems such as crop damage and/or water supply shortages.

**Filtration:** A treatment process that physically removes particles from water as the water passes through a medium.

**Groundwater:** The supply of fresh water found beneath the earth's surface, usually in aquifers. Groundwater is often used to supply wells and springs.

**Herbicide:** A chemical agent used to kill plants, especially weeds. Used widely in agriculture.

**Highest Locational Running Annual Average (HLRAA):** The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

**Immunocompromised:** A physical condition in which the human immune system becomes less capable of warding off illness or infection.

**Inorganic:** Composed of or involving organisms (or their remains or products) that are not living. Examples of inorganic substances include minerals, rocks and salt.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goals (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 risk to health. MCLGs allow for a margin of safety.

**Maximum Residual Disinfection 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 Disinfection Level Goal (MRDLG):** The level of 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.

**Microbial:** A group of microorganisms such as bacteria, protozoa and viruses.

**Nephelometric Turbidity Unit (NTU):** A unit of measure used to determine the clarity of drinking water.

**Organic:** Of, pertaining to or derived from living organisms. Organic matter contains carbon, hydrogen and oxygen. Examples include humans, plants and animals.

**Particulates:** Of or relating to minute separate particles.

**Pesticides:** Any substance or chemical applied to kill or control pests, including weeds, insects, algae, rodents and other undesirable agents.

**Radionuclides:** Naturally occurring and human-made radionuclides are present throughout the environment. They are found in varying amounts in soil, water, indoor and outdoor air — and even within our bodies — making exposure inevitable. State and Federal regulations establish safe drinking water maximum contaminant levels for a variety of radionuclides. Monitored contaminants include Gross Alpha Radiation, Radium-226, Radium-228, and Combined Radium radionuclides. The existing treatment process does not reduce or remove these contaminants. Except in extreme circumstances, radiation resulting from the ingestion of radionuclides in drinking water is far lower than radiation resulting from other sources of exposure, like radon found in some basements. Radon is a radionuclide classified as an unregulated contaminant. During the aeration treatment stage, radon can be removed from the

water source. Additional information about Radon and aeration is included in this report. The concentration of radionuclides found in our water is well within safe regulatory guidelines.

**Radon:** Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the United States. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also increase the risk of stomach cancer. Radon can build up to high levels in all types of homes. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can also be released into indoor air from tap water when showering, washing dishes, and performing other household activities. A radon level less than 4 picocuries per liter of air (pCi/L) is considered safe. Between 0.0019 – 0.0070 pCi/L of radon may enter the air from City tap water — far less than radon entering homes through the foundation. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy.

For additional information, call your state radon program (800-838-5992) or the EPA's Radon Hotline (800-767-7236).

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

**Surface water:** All water naturally open to the atmosphere and all springs, wells or other collectors that are directly influenced by surface water. Water located close to the earth's surface.

**Total Organic Carbon (TOC):** Amount of carbon found in an organic compound; used as an indicator of water quality.

**Revised Total Coliform Rule (RTCR):** Revised compliance rule that aims to increase public health protection through reduction of pathways for contamination; find-fix-document.

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

**Turbidity:** Turbidity is a measure of the cloudiness of water. Turbidity is a good indicator of treatment filter performance and is regulated as a Treatment Technique.

**Violation:** Exceeding the MCL of a contaminant regulated by the federal government; failure to properly monitor or report regulated contaminants would also be considered a violation.