



CEDAR RAPIDS
City of Five Seasons®



2021

Water Quality Report



Our water quality efforts start upstream, where we work to prevent contaminants from getting into the source water. The City collaborates with many partners to help protect our precious water resources as it heads downstream, reaches our wells, and flows through your tap. Cedar Rapids is committed to providing safe, clean drinking water when our consumers need it, today and into the future. Find out more about our water quality efforts inside.



www.CityofCR.com/WaterReport

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

Large photo: Silver Creek Oxbow at the NW Water Plant, one of many restored oxbows in Linn County Inset photos from top to bottom: 1) Tributary from field runoff as it enters the Cedar River; 2) One of Cedar Rapids' vertical wells to pump ground water, influenced by the Cedar River to the treatment plant; 3) Cedar Rapids J Ave. Water Treatment Plant

IMPROVING WATER QUALITY FOR ALL

Cedar Rapids is committed to providing safe, clean drinking water when our consumers need it—today and into the future. The City collaborates with many partners to help protect our precious resource before it reaches your tap and as it heads downstream.

WHAT'S HAPPENING UPSTREAM

The City's water quality commitment extends beyond our local area. The City collaborates with farmers, conservation groups, agricultural or commodity groups, our partners at the Iowa Department of Agriculture and Land Stewardship and Natural Resources Conservation Service, and other significant stakeholders upstream to improve soil health and water quality. In March 2022, the City of Cedar Rapids was awarded the Iowa Secretary of Agriculture's Leadership in Conservation award for the work we have done partnering with upstream farmers. Some of our recent efforts include:



Cover Crops

Many people don't realize that the City of Cedar Rapids owns over 2,000 acres of farmland, which it rents to local farmers. Beginning in 2020, the City of Cedar Rapids now requires cover crops to be planted on all cropland acres that we own. Crops planted during or after harvest control soil erosion, increase water retention, and improve nutrient uptake.



Bioreactors

Drainage water is routed through trenches filled with woodchips, reducing the amount of nitrates delivered downstream. In 2020, a bioreactor was installed at the Tuma Soccer Complex on farmland owned by the City.



Saturated Buffers

These practices divert tile outlet water into the soil adjacent to a stream, allowing for natural processes to filter out nitrates from the drainage water. In 2022, the City of Cedar Rapids launched a new partnership with the Iowa Department of Agriculture and Land Stewardship and six Soil and Water Conservation Districts, which aims to build 60 saturated buffer projects across the Middle Cedar Watershed by 2024.



Wetlands

Wetlands provide downstream benefits, such as flood prevention and water quality improvement, and add critical habitat for waterfowl and other animals. The Middle Cedar Watershed Management Authority, of which Cedar Rapids is a member, restored the 20-acre wetland in Buchanan County, featured at left, and hopes to see more added in the future.

Photo credit: Iowa Flood Center, Iowa Soybean Association

WHAT'S HAPPENING IN CEDAR RAPIDS

Stormwater — or rainwater and snowmelt from hard surfaces like roofs, driveways, and sidewalks — flows directly into streams and rivers instead of soaking into the ground. Unlike sewage, stormwater is not treated for pollutants. The City invests in various practices to improve the stormwater we send downstream:



Landscaping Features

Native vegetation soaks up runoff, absorbing nutrients and providing habitat for pollinators. Features like rain gardens, bioretention cells, and bioswales capture excessive runoff in ponds or send runoff to a storm sewer or surface water system.



Soil Quality Restoration

Tillage, aeration, and compost improve lawn health. Healthy soil absorbs a greater volume of rain water.



Permeable Pavers

Permeable pavers allow stormwater to seep through their joints and soak into the soil beneath instead of flowing directly to creeks and rivers.

Bever Tank Reservoir Resurfacing Update

Bever Tank Reservoir resurfacing was completed in 2021. The 1922 Bever Park Reservoir is an 8 million gallon underground water tank. The tank stores water for use during high-demand periods. It also balances water pressure in the area. A recent project emptied, cleaned, and refurbished the tank for use for years to come. Starting in 2022, the same will be done for the Mt. Vernon Rd. Elevated Tank.



WHAT'S HAPPENING IN LINN COUNTY

The City of Cedar Rapids is an active partner across various water quality improvement efforts within Linn County. Here are a few projects that have already made a positive impact:



Wetlands Establishment

The Morgan Creek watershed is an important resource to Cedar Rapids and Linn County that feeds the Cedar River and drinking water well fields for the City.

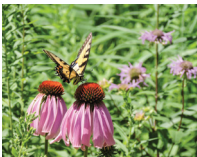
Cedar Rapids and Linn County Conservation partnered to develop a series of wetlands adjacent to E Avenue during the E Avenue roadway extension project. These wetlands, just east of the HWY 100 bypass, intercept roadway, neighborhood, and park stormwater before reaching Morgan Creek. Linn County Conservation continued this project within the County's Morgan Creek Park through Linn County Water and Land Legacy Bond funding to add two additional wetlands to the E Avenue wetland. This series of wetlands was completed in 2021 and functions to hold and clean about 565,149 cubic feet of stormwater storage at any given time.



ReLeaf Cedar Rapids

Following the Derecho of 2020, the City created the ReLeaf Cedar Rapids plan to plant over 600,000 trees in Cedar Rapids, prioritizing planting native and diverse

species, restoring a resilient tree canopy, and increasing social equity while limiting climate change. Trees provide benefits such as improved air quality, greater stormwater absorption, lower summer temperatures, greenhouse gas absorption, and higher property values. Trees also absorb thousands of gallons of rainfall before that water can become stormwater, protecting soil from erosion and keeping contaminants out of our waterways. Keeping our watershed clean and healthy means planting more fast-growing trees now.



1,000 Acres Pollinator Initiative

Cedar Rapids partnered with Linn County Conservation and the Monarch Research Project to convert unproductive public land into native prairie

pollinator habitats in Linn County, Cedar Rapids, and Marion. This project benefits monarchs, pollinators, and water quality health through nutrient management using green infrastructure. The goal, to establish 1,000 new acres of native pollinator habitat across Linn County, was achieved in 2021 with a total of 1,082 new acres funded by Monarch Research Project and managed by the jurisdictions involved. This initiative included 318 new acres of diverse native prairie within Cedar Rapids properties such as parks, golf courses, and other underutilized City lands.

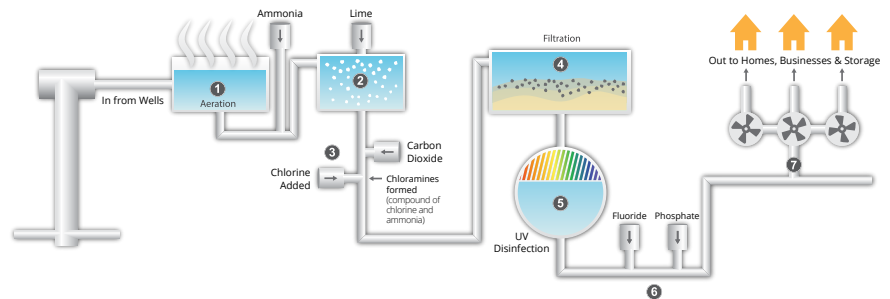
How Your Water is Treated

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 600 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.

Stormwater Cost-Share Program

The Stormwater Cost-Share Program reimburses 50% of costs (up to \$2,000) for the installation of features 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. For more information, visit CityofCR.com/Stormwater.

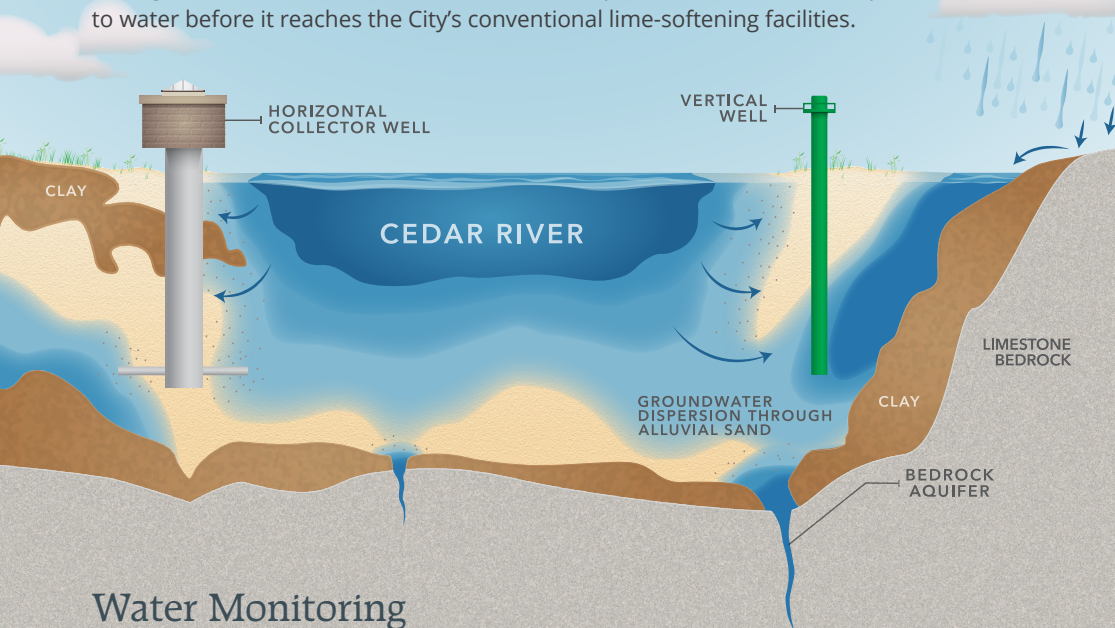


WHERE OUR WATER COMES FROM

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

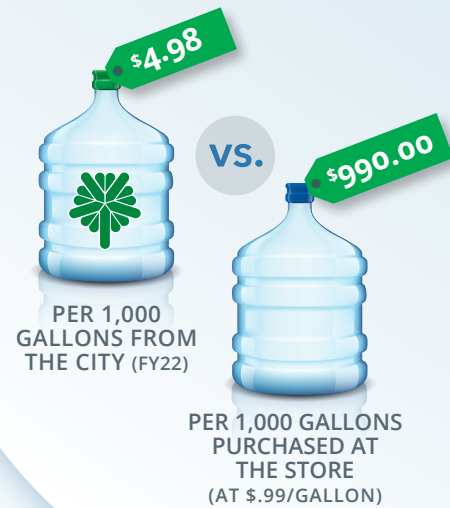
The City of Cedar Rapids has a continued collaboration with the United States Geological Survey (USGS) in monitoring water quality and occurrence of contaminants in the Cedar River, its tributaries, and the ground water aquifer that supplies water to our treatment plants. Data is also being collected 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.

Keeping Your Water Flowing

Water keeps our city running and our economy growing. While essential, water infrastructure is often unseen. Many never consider how water gets to the tap, or where it goes after we flush it away. Luckily, Cedar Rapids residents don't have to worry about it. The Utilities Department maintains good functioning pumps, treatment plants, and pipes to bring clean water into homes and businesses, and to remove and treat wastewater.

Many components in our drinking and wastewater treatment facilities were brought online decades ago and have been working ever since! We are constantly working to monitor portions of the system as the time comes to upgrade and replenish equipment.

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

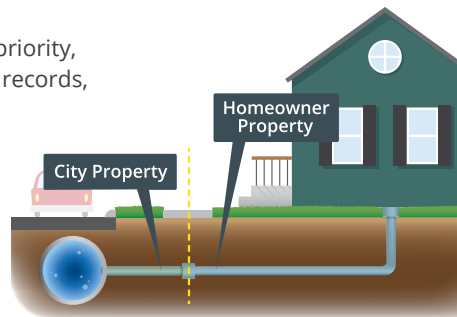


WHAT WE'RE DOING ABOUT LEAD

We work hard every day to exceed standards set by the Environmental Protection Agency (EPA). The EPA recently updated its Lead and Copper Rule Revisions for Public Water Systems, and their goal is to remove all lead service lines and replace any galvanized service lines that have ever been downstream of lead over the next several years. **Learn how these changes may affect you at CityofCR.com/Inventory.**

Some older homes utilize lead plumbing or fixtures, or have a lead service line between their house and the water main. The Cedar Rapids Water Division (CRWD) routinely tests for lead in the drinking water leaving our plants. In 2021, no lead was detected leaving our plants. To reduce the risk of dissolved lead from old pipes in homes, CRWD adds lead corrosion control to its water supply. This consists of a very low concentration of zinc ortho-phosphate, a compound that reduces the risk of dissolved lead in consumers' water. This small amount has long been proven safe for consumption.

Because public safety is our top priority, CRWD is updating its service line records, or an inventory of the plumbing between City 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.



The EPA's updated Lead-Copper Rule instructs CRWD to fully update its service-line inventory and replace a set amount of lead/galvanized connections through a program spanning several years. The CRWD has already been replacing lead service lines as they are encountered.

Additionally, there will be an increased effort to have property owners replace their portion of lead or galvanized service lines, if downstream of lead, as they are encountered. Replacing is in the best interest of public health and safety, and replacing lines as they are exposed is the most cost effective solution and reduces the need for sampling and filtering devices. The EPA is working to provide financial assistance to offset the cost for property owners; however, private side replacement is not mandatory. CRWD will notify homeowners of scheduled service line and water main work in their area. The goal is to complete service line replacements all at one time, to comply with the EPA's full lead service line replacement requirement.

For more information about the health effects of lead and how you can keep yourself and your home safe from lead, visit CityofCR.com/Inventory or EPA.gov/Lead.

THE CITY NEEDS YOUR HELP!

Customer participation to identify their service line material can reduce the expense of the inventory requirement. This may also reduce inconveniences associated with potential home or office visits. Help the CRWD in its efforts to remove lead service lines from the water system. Please take our short survey at 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.

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 more frequently 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.

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 4

8 a.m. – Noon,
Downtown Farmers' Market
Resident Appreciation Day

Thursday, June 9

5 – 6 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 2021 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 - 1.15	0.4	ND - 0.55	0.33	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate	mg/L	10	10	No	0.25 - 3.22	3.22	0.37 - 4.97	4.97	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite	mg/L	1	1	No	ND - 0.11	0.11	ND - 0.09	0.09	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	mg/L	NA	NA	No	NA	16.0	NA	14.0	Erosion of natural deposits; added to water during treatment process
Fluoride	mg/L	4	4	No	0.09 - 0.81	0.81	0.14 - 0.93	0.93	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 - 0.10	0.08	ND - 0.10	0.08	Runoff from herbicide used on row crops
TREATMENT TECHNIQUE INDICATORS					RANGE	REPORTED	RANGE	REPORTED	
Total Organic Carbon	Removal Credits	TT	NA	No	0.59 - 3.12	1.37	0.14 - 2.89	1.91	Naturally present in the environment
					Running Annual Average TOC Credits must be > 1.0				
Turbidity	NTU	TT	NA	No	0.01 - 0.36	0.36	0.02 - 0.31	0.31	Soil runoff
					% > 0.3 NTU		% > 0.3 NTU		
					0.002		0.000		
Cannot exceed 1.0 NTU & Monthly no more than 5% > 0.3 NTU									

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	30.4 - 36.3	32.6	25.5 - 37.1	30.0	Erosion of natural deposits, run-off	
Copper	mg/L	NA	1.0	ND - 0.013	0.002	ND - 0.013	0.009	Corrosion of household plumbing, erosion of natural deposits	
Manganese	mg/L	NA	0.05	ND - 23.3	9.6	ND - 0.60	0.0	Corrosion of household plumbing, erosion of natural deposits	
Sulfate	mg/L	NA	250	20.9 - 36.3	28.9	24.3 - 36.0	30.2	Erosion of natural deposits	
Zinc	mg/L	NA	5	0.14 - 0.25	0.21	0.15 - 0.26	0.22	Corrosion of household plumbing, erosion of natural deposits	
ORGANIC CHEMICALS				RANGE	AVG	RANGE	AVG		
Chloroform	µg/L	NA	70	0.8 - 1.7	1	ND - 2.1	1.4	By-product of drinking water disinfection	
Bromodichloromethane	µg/L	NA	0	ND - 0.6	0.2	ND - 0.7	0.3		
Chloroacetic Acid	µg/L	NA	0	ND - 2.0	0.5	ND - 2.0	0.5		
Dichloroacetic Acid	µg/L	NA	0	1.0 - 2.0	1.8	1.0 - 2.0	1.8		
Metolachlor	µg/L	NA	NA	0.10 - 0.30	0.23	0.10 - 0.30	0.21	Run-off from fertilizer used on row crops	
RADIONUCLIDES				RANGE	REPORTED	RANGE	REPORTED		
Radon	pCi/L	NA	NA	42 - 67	57	23 - 55	37	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 - 6.77	2.0	3.2	0	Corrosion of household plumbing systems; erosion of natural deposits
Copper	mg/L	1.3	1.3	No	ND - 0.198	0.066	0.069	0	Corrosion of household plumbing systems; erosion of natural deposits

REVISED TOTAL COLIFORM RULE	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
Total # Samples/Month	108	108	108	108	108	108	113	108	108	100	109	115
# Positive Coliform Samples/Month	0	0	0	0	0	0	1	0	0	0	0	0
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

DISINFECTANT & DISINFECTION BY-PRODUCTS					DISTRIBUTION SYSTEM		POSSIBLE SOURCES OF CONTAMINANT
	UNITS	MRDL	MRDLG	VIOLATION	RANGE	REPORTED	
Total Chlorine Residual	mg/L	4	4	NO	1.3 - 4.0	3.41	Water additive used to control microbial growth
	UNITS	MCL	MCLG	VIOLATION	RANGE	REPORTED	
Total Trihalomethanes (TTHM)	µg/L	80	NA	NO	ND - 2.8	2.88*	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 www.cityofcr.com/mcpp.*

	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
2017 Annual Average	1.25	65	<1	0.37	8.8	4.4	170	110.6	9.5	4.0	281	1.94
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	2.05	295	1.47

Sample Key

Highest Running Annual Average

Arsenic
Atrazine
Total Chlorine Residual
Radon

Maximum Value

Flouride
Nitrate
Nitrite
Turbidity

Single Result

Sodium
Toluene
Combined Radium
Radium -226
Radium - 228
Gross Alpha

Lowest Running Annual Average

Total Organic Carbon

Highest Locational Running Annual Average

Total Trihalomethanes
Total Haloacetic Acids

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. 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.

ACRONYMS

AVG: Average	pCi/L: Picouries per liter
ND: Not Detected	MCL: Maximum Contaminant Level
MRDL: Maximum Residual Disinfectant Level	MCLG: Maximum Contaminant Level Goal
NR: Not Regulated	NA: Not Applicable
mg/L: Milligrams per liter or parts per million	NTU: Nephelometric Turbidity Unit
µg/L: Micrograms per liter or parts per billion	MRDLG: Maximum Residual Disinfection Level Goal

Frequently Asked Questions

Is there PFAS in my drinking water?

Sampling for 18 specific PFAS compounds was done in July 2020. Results were below the level of reliable reporting limit for the compounds tested at that time. Currently, there are no regulations for these compounds. While regulatory sampling has not been required, plans for future sampling are under review. Locations where the compounds were manufactured, or air fields adjacent to streams where a significant amount of fire-fighting foam may have been used, appear to be the most likely sites of concern for these compounds. Neither of these cases present a concern for our source water at this time.

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. Is it OK to drink?

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.

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.

In most cases, it takes another 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) if a precautionary boil advisory notice is issued.

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.

2021 WATER REPORT SHOWS 100% Compliance

The Water division achieved 100% compliance with the Iowa Department of Natural Resources' water quality expectations in 2021. This marks the fourth 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 2021, 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.

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.

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.

Per- and Polyfluoroalkyl Substances (PFAS): A group of manufactured chemicals 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 they can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

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).

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.