OUR WATER

2024 Annual Drinking Water Quality Report

THREE RIVERS FILTRATION PLANT

CITY UTILITIES
WATER THAT WORKS

Letter from Kumar Menon, Director of City Utilities

I am pleased to present the 2024 Water Quality Report, reflecting data from 2023. It shows that our drinking water met or exceeded the standards set by the U.S. Environmental Protection Agency.

Our water is a precious resource. The scarcities and growing number of utility challenges around the country, especially in the West and South, underscore how vital our water is to every aspect of life and how important it is to make ongoing investments in our utility's resilience and sustainability.

Every day of the year, our dedicated team works tirelessly to provide you with high-quality, safe drinking water. We understand the importance of water in your daily lives, not just for drinking but also for fire protection, business operations and family needs.

At the Three Rivers Filtration Plant, we conduct constant water testing in our lab and through many automated processes, totaling 50,000 daily tests — more than 18 million tests per year. The safety of our water is paramount.

Our team maintains and delivers water through nearly 1,500 miles of water mains across Allen, Wells and Whitley counties, covering an area of 181 square miles.

Safety and reliability are priorities, but we are equally committed to delivering refreshing, good-tasting water to your homes and businesses. We are proud to have won Indiana's Best Tasting Water award for the second year in a row and the third time in the last five years.

Over the past 10 years, we have aggressively replaced more than 140 miles of aging and failing water pipes and numerous water mains. Our efforts are paying off. In 2010, we had 520 water main breaks, and since starting our replacement efforts, we've seen a downward trend, with 340 breaks in 2023. But that's still too many.

Our future plans specify, replacing more than 10 miles of pipe each of the next five years, an investment of more than $50 million.

A priority now is assisting homeowners in replacing their privately owned lead service lines on their properties. The change-out can be low-cost or even free for eligible homeowners based on annual income. Visit utilities.cityoffortwayne.org/remove-lead to learn more.

If you live in an older home with a lead line, the time is now for you to act. To emphasize the urgency of this matter, the Federal government is requiring homeowners to replace their lead service lines and requires all utilities to list the address on their website of any property with a lead service line. This information will be available to the public by October 2024, which is valuable information for homeowners and those considering renting or purchasing a home.

Water is essential for our homes, businesses, health, and safety. While many Americans face water shortages, our region has a reliable supply, and we've never had to tap into our reservoirs. Our long-range planning and investments ensure resiliency and reliability for our operations and, more importantly, for you—our customers.

Our core mission is to supply every customer with abundant, clean, safe, reliable and affordable water. We take this responsibility seriously and pledge to meet your daily water needs. We are City Utilities, Water that Works.

Where Does Our Water Come From?

Water provided to City Utilities customers comes from the St. Joseph River.

Fort Wayne draws an average of about 36 million gallons of water from the river each day. This "raw" water is treated, filtered, and tested at the Three Rivers Filtration Plant before it is distributed to customers.

The Indiana Department of Environmental Management (IDEM) has conducted a Source Water Assessment for City Utilities' water supply. The Source Assessment has identified potential sources of contamination. The report also analyzes the hydrological conditions that may affect the water supply's susceptibility to possible contaminants. For more information concerning the Source Water Assessment, contact the Water Quality Manager of the Three Rivers Filtration Plant, Michele Gerke, at 260-427-1303.

Sources of Drinking Water

The sources of drinking water (both tap and bottled) 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, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural and livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential land uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Information about Lead

Lead in drinking water usually comes from materials and components in water service lines and interior plumbing; therefore, lead levels in water may increase because of the kinds of pipes and plumbing fixtures in homes and businesses. City Utilities cannot control the variety of materials used in plumbing fixtures present in homes and businesses. Homes built before 1937 likely have lead lines, and the Environmental Protection Agency says homes built before 1987 could have lead soldering.

City Utilities uses orthophosphate in our treatment process as a protective layer inside lead service lines, creating a barrier between the lead pipes and the water flowing through them and reducing levels of lead found primarily in water service lines. Each year we pull samples from community homes and businesses to test for lead. In 2023 testing for lead was within regulatory limits.

Homes built before 1937 are likely to have lead service lines.
Homes built before 1981 may have lead service lines.

Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Until you can eliminate the lead in your private plumbing, you can minimize your potential for lead exposure by letting the water run before using it. Turn on the cold water and let it run for 30 seconds to two minutes before you use the water for drinking or cooking. If you are concerned about the level of lead in your water, you may wish to have your water tested by a private laboratory. Information on lead in drinking water, testing methods, and other steps you can take to minimize exposure to lead are available from the Safe Drinking Water Hotline at 1 (800) 426-4791 or at www.epa.gov/safewater/lead.

Drinking Water and Your Health

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals such as people with cancer who are undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people and infants, can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers.

Cryptosporidium is a microbial pathogen that may be found in surface water such as rivers, lakes and streams throughout the United States. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of the infection include nausea, diarrhea and abdominal cramps.

Cryptosporidium oocysts must be ingested to cause disease, and the illness may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people, infants, small children and the elderly are at greater risk for having cryptosporidiosis advance into a life-threatening illness.

Guidelines from the US EPA and Centers for Disease Control and Prevention on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

In 2023, the highest level of Cryptosporidium found in the river water coming into the water filtration plant before it was treated was 0.091 oocysts per liter of water. Cryptosporidium was NEVER found in the drinking water that City Utilities sent out to its customers, as is required by federal standards. That means that 100% of the time, City Utilities' Ultraviolet (UV) water treatment process was able to remove or deactivate these "germs."

Investing to Strengthen Water System

City Utilities invested more than $30 million in infrastructure improvements in 2023 to support economic development and strengthen neighborhoods. Here's the scorecard:

- Replaced nine miles of aging water mains in Wildwood Park, Anthony and McKinnie Area, Forest Park, Glenwood Park, Caribe Colony, Tamarack, and Oakhurst Park. The neighborhoods had a combined 592 main breaks in 15 years.
- Placed the 175-feet-tall White Oak Tank (water tower) into service. The 500,000-gallon tank supplies additional water during peak usage, such as a fire, to more than 72,000 properties in the central pressure zone.
- Assisted more than 400 residents who signed up to take advantage of our cost-effective lead line replacement program.

Free or Discounted Lead Line Replacement

Replace your home's private lead service line before you are federally mandated to do it. It's the line you own that connects your home to the curb box and the City Utilities water main.

There are free replacement costs in some cases based on household income and reduced costs for others. There are even cost-effective options for landlords. More information at utilities.cityoffortwayne.org/remove-lead or call 427-1234.

Testing Our Water

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (US EPA) sets regulations limiting the number of certain contaminants in water that come from public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. The US EPA also requires that public water systems make an annual report, such as this one, to all of their customers. Bottled water producers don't face the same requirement to share information regularly.

The US EPA and the State of Indiana require City Utilities to regularly test the drinking water we produce and send it out to make sure that it remains safe. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. However, the presence of these contaminants in drinking water at a level below the limits set by regulatory agencies does not indicate that the water poses a health risk.

The table to the right shows substances that are regulated by the US EPA that were detected in our finished drinking water between January 1 and December 31, 2023. City Utilities tests for many other substances, but because they were not detected, they are not reported here. Some tests are required only once per year because the US EPA and the State of Indiana have determined that the concentration of these substances does not change frequently. The table has no range of results for tests that are required only once a year.

City Utilities also tests for many substances that are not regulated. Monitoring unregulated contaminants helps the US EPA determine where certain contaminants occur and whether the agency should consider regulating those in the future. More info: utilities.cityoffortwayne.org

News About PFAS

City Utilities has been proactive about per- and polyfluoroalkyl substances (PFAS), testing for these chemicals since 2014. On April 10, 2024, the EPA introduced new standards that will require utilities to ensure PFOA, PFOS, PFNA, PFHxS, PFBS, and HFPO-DA are removed from drinking water to extremely low levels.

Over the past ten years, we've collected samples and sent them to labs to help the EPA develop new standards. Since 2014, our tests have not detected these six chemicals in our drinking water, including our latest tests in March 2024.

For more information, visit utilities.cityoffortwayne.org/pfas-and-drinking-water/.

Awards in 2023

- Best Tasting Water in Indiana
  Alliance of Indiana Rural Water
- Sustainable Water Utility Management
  Association of Metropolitan Water Agencies
- Top Operations Quiz-Bowl Winner
  American Water Works Association

Best tasting water
3 of last 5 years

How to Read the Water Quality Table

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):
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.

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

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

Detected Level:
The highest level of a contaminant detected for comparison against the accepted level. The detected level could be the highest single measurement or it may be an average, depending on the peak level of a contaminant.

Range:
The lowest to highest values for all samples tested for each contaminant. If only one sample is tested, no range is listed.

HA: Health Advisory level.

NA: Not applicable.

MNR: Monitoring not required but recommended.

ppm: Parts per million or milligrams per liter (mg/L).

ppb: Parts per billion or micrograms per liter (ug/L).

NTU:
Nephelometric Turbidity Units. A measure of water's cloudiness and an indicator of the effectiveness of the water filtration process.

%: Percent of monthly samples that were positive.

Oocyst:
A fertilized gamete of a parasitic organism's sporozoans that is enclosed in a thick wall.

Chemists - Michele Gerke, Steve Hinkleman

Water Quality Table

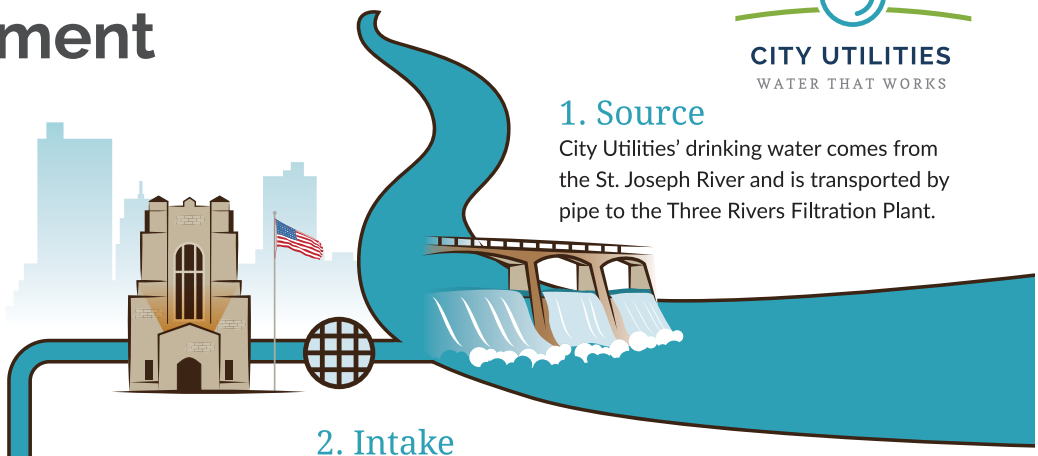
Contaminants	Units	MCLG	MCL	Compliance Achieved	Highest Level Detected in Your Water	Range	Typical Sources
Disinfectants & Disinfection By-Products							
Chlorine	ppm	4	4	Yes	2.07	1.58 - 2.07	Additive used in drinking water treatment process to control bacteria
Chlorine Dioxide	ppb	800	800	Yes	171	38 - 171	Additive used in drinking water treatment process to control bacteria
Chlorite	ppm	0.8	1	Yes	0.91	0.61 - 0.91	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	ppb	NA	60	Yes	17.2 Highest LRAA at site #8	2.7 - 23.9	By-product of drinking water disinfection NOTE: compliance is based on each location's running annual average (LRAA). The location running annual average for the site with the highest individual result of 23.9 was 17.2
Total Organic Carbon (TOC)	ppm	NA	TT	Yes	The percentage of TOC was measured each month and the system met the TOC removal requirements	NA	Naturally present in the environment
Total Trihalomethanes (TTHM)	ppb	NA	80	Yes	20.6 Highest LRAA at site #12	7.2 - 28.5	By-product of drinking water disinfection NOTE: compliance is based on each location's running annual average (LRAA). The location running annual average for the site with the highest individual result of 28.5 was 18.1
Inorganic Compounds							
Fluoride	ppm	4	4	Yes	0.86	0.11 - 0.86	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	10	Yes	4.27	0.188 - 4.27	Runoff from fertilizer use; leaching from septic systems; sewage discharge; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	1	Yes	0.030	0 - 0.030	Runoff from fertilizer use; leaching from septic systems; sewage discharge; erosion of natural deposits
Sodium	ppm	0	NONE	NA	32	14 - 32	Naturally present in the environment
Barium	ppm	2	2	Yes	0.022	0.008 - 0.022	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	ppb	100	100	Yes	0.9	0 - 0.9	Discharge from steel and pulp mills; erosion of natural deposits
Cyanide	ppb	200	200	Yes	0	Only one test is required per year	Discharge from plastic, fertilizer, and steel/metal factories
Nickel	ppm	NA	NA	NA	0.0015	0 - 0.0015	Erosion of natural deposits; corrosion of household plumbing systems
Thallium	ppb	0.5	2	Yes	0	NA	Discharge from electronics, glass,leaching from ore-processing sites, drug factories
Microbiological Contaminants							
Total Coliform	% of positive samples monthly	0	5	Yes	1.62	0 - 1.62	Naturally present in the environment
E.coli	Total # of postive E.coli samples	0	Based on the occurrence of a condition that includes routine and repeat samples	Yes	0	NA	Naturally present in the environment
Turbidity	Lowest % meeting limit of 0.3 NTU	100	95	Yes	100	NA	Soil runoff
Turbidity		NA	TT-1 NTU	Yes	0.1	NA	Soil runoff
Cryptosporidium	oocysts/100 L	0	TT	NA	0	NA	Human and animal fecal waste
Source (Raw) water Cryptosporidium	oocysts/ L	NA	NA	NA	0.091	0 - 0.091	Human and animal fecal waste
Volatile Organic Compounds							
None Detected							
Synthetic Organic Compounds Regulated							
Atrazine	ppb	3	3	Yes	0.24	0 - 0.24	Runoff of herbicide used on row crops
Simazine	ppb	4	4	Yes	0	NA	Runoff of herbicide used on row crops
2,4-D	ppb	70	70	Yes	1.4	0.0 - 1.4	Runoff of herbicide used on row crops
Unregulated Compounds					Average		
Metolachlor	ppb	NA	NA	NA	0.32	0.12 - 0.75	Runoff of herbicide used on row crops
Dicambia	ppb	NA	NA	NA	0.22	0.0 - 0.87	Runoff of herbicide used on row crops
Total Hardness	ppm	NA	NA	NA	121	92 - 156	Runoff of limestone and dolamite
Inorganic Contaminants					90th percentile		
Copper (Jan - June 2023)	ppm	1.3	90% of samples taken below AL = 1.3	Yes	0.059	Samples taken = 108 samples Exceeding AL = 0	Corrosion of household plumbing systems; erosion of natural deposits
Copper (July - Dec 2023)	ppm	1.3	90% of samples taken below AL = 1.3	Yes	0.052	Samples taken = 102 samples Exceeding AL = 0	Corrosion of household plumbing systems; erosion of natural deposits
Lead (Jan - June 2023)	ppb	0	90% of samples taken below AL = 15	Yes	3.17	Samples taken = 108 samples Exceeding AL = 1	Corrosion of household plumbing systems; erosion of natural deposits
Lead (July - Dec 2023)	ppb	0	90% of samples taken below AL = 15	Yes	3.84	Samples taken = 102 samples Exceeding AL = 0	Corrosion of household plumbing systems; erosion of natural deposits
Radioactive Contaminants (January 2020)							
Combined Radium 226/228	pCi/L	0	5	Yes	1	1 - 1	Erosion of natural deposits
Gross alpha excluding radon and Uranium	pCi/L	0	15	Yes	0.2	0.2 - 0.2	Erosion of natural deposits
Unregulated Contaminant Monitoring Rule* - UCMR5 (June 2023, Sept.2023, Dec. 2023 & March 2024)					Average		PFAS are man-made chemicals that have been used in industry and consumer products worldwide since the 1940s. They have been used to make nonstick cookware, water-repellent clothing, stain resistant fabrics and carpets, some cosmetics, some firefighting foams, and products that resist grease, water, and oil.
Perfluorohexanoic Acid (PFHxA)	ppb	NA	NA	NA	0.0017	0 - 0.0041	
Perfluoropentanoic Acid (PFPeA)	ppb	NA	NA	NA	0.0057	0.0045 - 0.0080	

Our system collected samples under the U.S. EPA Unregulated Contaminants Monitoring Rule (UCMR5) for 29 PFAS compounds and lithium. This monitoring is being conducted so the EPA can receive occurrence data for these compounds to determine what additional compounds may need to be regulated in drinking water. We collected samples in June, September, and December of 2023 and March of 2024 and detected the compounds shown in the table. These compounds are not regulated at this time.

City Utilities' Water Treatment Process

CITY UTILITIES
WATER THAT WORKS

As the water moves through the stages of treatment, it is tested again and again so that processes can be continually "tweaked" to ensure the finished water meets all of the standards for quality that are set by the US Environmental Protection Agency and the Indiana Department of Environmental Management.

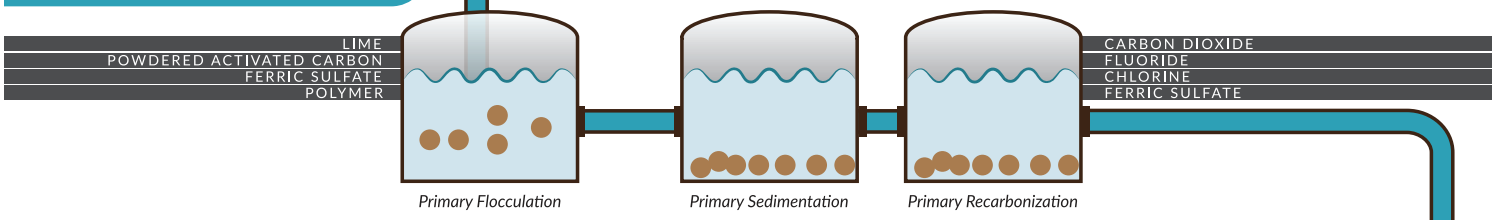


1. Source

City Utilities' drinking water comes from the St. Joseph River and is transported by pipe to the Three Rivers Filtration Plant.

2. Intake

Screens on the water intake pipes ensure that trash, leaves, limbs, and other large items floating in the river are not pulled into the treatment process.



Primary Flocculation *Primary Sedimentation* *Primary Recarbonization*

3. Cleaning the Water

The first step in the treatment process involves the addition of ferric sulfate, polymer, lime, and carbon to the raw water.

4. Flocculation

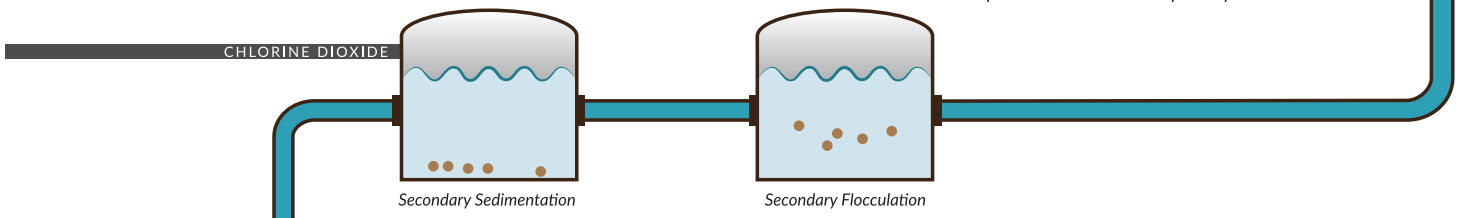
During flocculation, the carbon that was added earlier helps to remove tastes and odors.

Water flows into settling tanks where the clumps of floc are so heavy they settle to the bottom and clear water flows out from the top. This process of flocculation and settling happens two times.

5. Softening & Disinfection

Early in the treatment process, City Utilities adds lime to soften the water.

Disinfection: The Three Rivers Filtration Plant uses chlorine to disinfect impurities that come in to the plant. The process does NOT impact safety, in fact when coupled with ultraviolet (UV) disinfection the processes offer better protection than what is required by the EPA and IDEM.



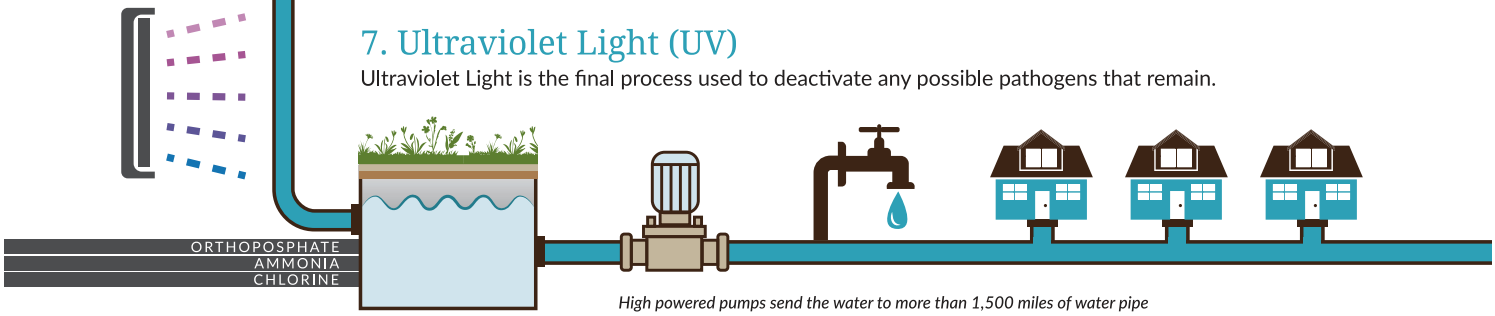
Secondary Sedimentation *Secondary Flocculation*

6. Filtration

Filters made of sand, trap microorganisms and suspended particles between the grains of sand. Magnetic-like electrical charges in the sand and water remove microorganisms.

7. Ultraviolet Light (UV)

Ultraviolet Light is the final process used to deactivate any possible pathogens that remain.



Filtered Water Reservoir

High powered pumps send the water to more than 1,500 miles of water pipe that deliver drinking water to neighborhoods throughout the community.

CITY UTILITIES
Citizens Square, 200 E. Berry, Suite 270
Fort Wayne, IN 46802

Important Information Sources:

Three Rivers Filtration Plant
260-427-1234
utilities.cityoffortwayne.org

Indiana Department of Environmental Management (IDEM)
1-888-233-7745
in.gov/idem/cleanwater/2450.htm

EPA's Safe Drinking Water Hotline
1-800-426-4791
www.epa.gov/sdwa

Water Qualities that Matter to You

City Utilities is committed to providing water that is consistently safe and refreshing. Changing weather conditions and fluctuations in river water quality can affect our water's taste and odor. Staff work to anticipate these changes, adjusting our processes to correct any taste and odor issues. For more information, contact City Utilities by calling 427-1234 or visit our website, where we post an indicator of our water's current taste and odor at utilities.cityoffortwayne.org/drinking-water.

The "feel" of water is determined by its softness. Harder water contains higher levels of dissolved minerals, primarily calcium and magnesium. While harmless, these minerals can cause water spots on dishes and limescale buildup in pipes, appliances and fixtures. The levels of these minerals are measured in milligrams per liter. To further improve the quality of our water, City Utilities softens it with calcium hydroxide (lime). While hard water has between 150 and 300 mg/L of hardness, City Utilities' water had an average hardness of 121 mg/l in 2023 and is considered moderately soft. Softer water reduces soap or detergent usage and helps extend the life of your water heater and household appliances.

The Board of Public Works reviews and approves contracts for utility construction projects that impact how your drinking water is treated. The Board meets every Tuesday at noon at Citizens Square, 200 E. Berry Street, Fort Wayne, Indiana. The meetings are open to the public and are on Public Access TV.

Clean Drains Help Our Rivers

Help protect our rivers by becoming a 2024 Drain Stormer.

Trash, grass clippings, pet waste and debris wash through our storm drains, polluting our rivers and harming water quality and aquatic life.

Get your Clean Drains kit to clean and mark the storm drains near you. Or create chalk drawings to remind everyone: Only Rain in the Drain. Register using the QR code to the right or at utilities.cityoffortwayne.org/cleandrains2024

Ways You Can Help

City Utilities supports the St. Joseph River Watershed Initiative (SJRWI), a non-profit watershed planning and protection organization that works with residents and communities along the St. Joseph River from southern Michigan, northwest Ohio, and Indiana. SJRWI educates property owners, tests river water quality, develops management plans and implements best management practices to reduce pollution going into the river. You can help Fort Wayne's drinking water by volunteering with the group. Visit www.sjrwi.org

Fire Protection

System investments increase water capacity and reliability for firefighting. Combined with the Fort Wayne Fire Department's professionalism, this results in a Class 2 ISO fire protection rating, influencing property insurance costs.

In 2023, City Utilities maintained 12,179 fire hydrants.

City Utilities' Mission

To support public safety and public health and enhance regional economic development by delivering high quality, affordable water, wastewater and stormwater services in ways that protect the environment.

AVISO IMPORTANTE

Este reporte contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda. En español: 427-1234.

အရေးကြီးသောသတင်

ဤအစီရင်ခံစာသည် သင့်သောက်ရေနှင့်ပတ်သက်ပြီး အရေးကြီးသော အချက်အလက်များပါဝင်သည်။ တစုံတဦးကို သင့်အတွက် ဘာသာပြန်ခိုင်းပါ၊ သို့မဟုတ် 427-1234 သို့ဖုန်းဆက်၍ မြန်မာဘာသာစကားဖြင့် အကြောင်းအရာသိရှိနားလည်ထားသူ တဦးဦးနှင့် ဆွေးနွေးပါ။