

Where Does Fort Wayne's Drinking Water Come From?

The St. Joseph River is the source of drinking water for customers of Fort Wayne City Utilities.* Water flows into the river from more than 694,000 acres in northeast Indiana, northwest Ohio and a small part of south central Michigan. The primary land use in the watershed is agricultural.

In 2014, Fort Wayne withdrew 30.08 million gallons of water each day from the river. This "raw" water is treated, filtered and tested at the Three Rivers Water Filtration Plant before it is distributed to customers. Fort Wayne operates two dams on the river: the Cedarville Dam located near Leo-Cedarville and the St. Joe Dam located near the intersection of North Anthony and Coliseum Boulevards in Fort Wayne. These dams hold water behind them to ensure that City Utilities has an adequate water supply during the driest times of the year.

Fort Wayne City Utilities works with partners upstream to protect the

quality of water in the St. Joseph River before it gets to Fort Wayne. The St. Joseph River Watershed Initiative involves many watershed stakeholders in testing river water quality, developing management plans, implementing best management practices to reduce pollution going into the river and educating property owners.

Do you want to help protect Fort Wayne's drinking water at its source? Check out the St. Joe Initiative's website at www.sjrwi.org for information on ways you can volunteer.

*A few homes in the Honeysuckle subdivision receive water from wells operated by City Utilities. As of December 4, 2014 all residents of southwest Fort Wayne became customers of City Utilities but most continued to receive water from wells previously operated by Aqua Indiana. These customers will receive a water quality report from both providers.

City Utilities Receives National Recognition

The outstanding performance of Fort Wayne City Utilities continues to be recognized annually by the Partnership for Safe Water – a voluntary alliance of five national water industry organizations and the US EPA. For



15 years, City Utilities has received the Partnership Director's Award each year for providing water that is better than national standards and operating the water utility according to Partnership guidelines. Fort Wayne will be recognized for this accomplishment at the national conference of the American Water Works Association in June 2015.



2015 Annual Drinking Water Quality Report Fort Wayne City Utilities

Dear Valued Customers,

On behalf of Mayor Henry and everyone at City Utilities, I am pleased to present our annual water quality report for the calendar year 2014. Last year, City Utilities provided the Fort Wayne community with nearly 11 BILLION gallons of safe, high quality drinking water. We take pride in always delivering a reliable supply of water that

meets, or is better than, federal and state regulations require.

An essential part of City Utilities' mission is supporting economic development and growth in the region. Often businesses make decisions about where they will locate or expand based on the availability of an abundant and affordable water supply. Insightful planning in the past, careful management of our assets and proactive infrastructure replacement has allowed City Utilities to meet the needs of our existing customers with capacity to add more. On December 4, 2014, City

Utilities welcomed 12,000 new customers in the southwest Fort Wayne area. These former Aqua Indiana water customers will be transitioned to City Utilities water over the next year and will soon be enjoying the great water and improved water pressure that our existing customers have.

While other communities struggle with water shortages, we are blessed to have a plentiful source of water that we can borrow, use and return. But with that gift of abundant river water comes a responsibility to treat it with respect. City Utilities is committed to putting water back into our river system that

is cleaner than it was when we took it out. We participate with local watershed groups working to improve the quality of our rivers, and we look forward to new opportunities to interact with our rivers in ways identified in the City's riverfront study.

If you have comments about our product or our performance I hope you will share those with me at anytime by emailing me at waterquaity@cityoffortwayne.org.

Sincerely, Kumar Menon Director of City Utilities



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 espagnol: 311.

CITY UTILITIES SERVING YOU, SUPPORTING OUR REGION

Drinking Water and Your Health

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly persons 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 U.S. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of the infection include nausea, diarrhea and abdominal cramps. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals can overcome the disease within a few weeks. However, immune-compromised people, infants, small children and the elderly are at greater risk for developing 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.

2014 was the first full year for Fort Wayne City Utilities to use a new ultraviolet light water disinfection system specifically to deactivate *Cryptosporidium* and other similar pathogens. To ensure your safety, City Utilities also uses a stringent monitoring program, testing both source water from the St. Joseph River and finished drinking water, to ensure that any *Cryptosporidium* has been removed or neutralized. In 2014 the highest level of *Cryptosporidium* found in the river coming into the water filtration plant was 0.800 oocysts per liter of water. No *Cryptosporidium* was found in the drinking water that City Utilities sent out to its customers, as is required by federal standards.

Keeping Your Drinking Water Safe

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (US EPA) sets regulations that limit the amount of certain contaminants in water that comes from public water systems such as Fort Wayne's. Food and Drug Administration 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.

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 livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff,

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.

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.

Treatment technologies used at Fort Wayne's Three Rivers Water Filtration Plant, including some chemicals, filtration and disinfection using ultraviolet light, remove or significantly reduce these contaminants, making the water safe to drink when it meets regulatory standards.

A Source Water Assessment has been completed for the public water supply for our community. The Source Water Assessment has identified potential point and non-point sources of contamination and hydrogeological conditions that may affect the susceptibility of the water supply to potential contaminants. More information concerning this Source Water Assessment can be obtained by contacting Chet Shastri at (260) 427-1338. **Testing Our Water** — Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants in drinking water – below the limits set by regulatory agencies – does not indicate that the water poses a health risk. The US EPA and the State of Indiana require City Utilities to regularly test the drinking water we produce and send out to make sure that it remains safe.

The table below shows substances that are regulated by the US EPA that were detected in Fort Wayne's finished drinking water between January 1 and December 31, 2014. Results of all tests performed in 2014 met or were better than federal and state standards require. 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 EPA and State of Indiana have determined that the concentration of these substances does not change frequently. For tests required only once a year there is no range of results in the table.

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.

Water Quality Table

Contaminants	Units	MCL	G MCL Co	mplian Achieve	Highest Leve Detected in d Your Water	Range	Typical Sources
Disinfectants & Disinfection By-Products							
Chlorine	ppm	4	4	Yes	1.86	1.24 - 1.86	Additive used in treatment process to control bacteria
Chlorine Dioxide	ppb	800	800	Yes	209	38 - 209	Additive used in treatment process to control bacteria
Chlorite	ppm	0.8	1	Yes	0.879	0.024 - 0.879	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	ppb	NA	60	Yes	20.6	4.6 - 27.9	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 27.9 was 19.78
Total Organic Carbon (TOC)) mg/L	NA	TT	Yes	The percentage of TOC was each month and the syster TOC removal requiren	measured NA met the NA nents	Naturally present in the environment
TTHMs (Total Trihalomethanes	s) ppb	NA	80	Yes	17.48	4.1 - 40.2	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 40.2 was 15.62
Inorganic Compounds							
Fluoride	ppm	4	4	Yes	1.09	0.038 - 1.09	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitroge	en) ppm	10	10	Yes	3.36	0.199 - 3.36	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Nitrite (measured as Nitroge	n) ppm	1	1	Yes	0.034	<0.001 - 0.034	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Sodium	ppm	0	none	NA	39	12 - 39	Naturally present in the environment
Barium	ppm	2	2	Yes	0.015	0.0076 - 0.015	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Nickel	ppm	NA	0.1	Yes	0.001	0 - 0.001	Leaching from metals in contact with drinking water such as pipe sand fittings
Selenium	ppm	NA	NA	NA	0.021	0 - 0.021	Naturally occurring compound
Sulfate	ppm	NA	NA	NA	46	Only one test is required per year	Naturally occurring compound
Microbiological Contaminants							
Total Coliform sa	% of positive mples monthly	0	5	Yes	1.26	0.0 - 1.26	Naturally present in the environment
Turbidity k	% of samples below 0.3 NTU	100	95	Yes	100	100.0 - 100.0	Soil runoff
Turbidity	NTU	NA	TT	Yes	0.2	NA	Soil runoff
Cryptosporidium c	ocysts/100 L	0	TT	Yes	0	NA	Human and animal fecal waste
Volatile Organic Comp	ounds						
NA	ppb	NA	NA	NA	NA	NA	Leaching from PVC pipes; discharge from plastic factories
Synthetic Organic Com	pounds						
Atrazine	ppb	3	3	Yes	0.1	0.0 - 0.10	Runoff of herbicide used on row crops
2,4-D	ppb	70	70	Yes	0.70	0.0 - 0.70	Runoff of herbicide used on row crops
Unregulated Compounds							
Dicamba	ppb	NA	NA	NA	0.1	0.0 - 0.10	Runoff of herbicide used on row crops
Inorganic Contaminants 90th percentile							
Copper	ppm	1.3	90% of samples take below AL = 1.3	n Yes	0.125	Samples taken = 52 samples Exceeding AL = 0	Erosion of natural deposits; Corrosion of household plumbing systems
Lead	ppb	0	90% of samples take below AL = 15	n Yes	4.5	Samples taken = 52 samples Exceeding AL = 3	Corrosion of household plumbing systems; Erosion of natural deposits

More information about drinking water contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.



FORT WAYNE CITY UTILITIES

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

Important Information Sources:

Three Rivers Water Filtration Plant Vicky Zehr – Water Quality Manager 260-427-1254

Or 311

EPA's Safe Drinking Water Hotline 1-800-426-4791

www.epa.gov/drink/

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A Word About Lead

Fort Wayne City Utilities regularly tests water from a number of homes in the community to determine lead levels. Water that comes out of Fort Wayne's water filtration plant meets all state and federal requirements for lead. However, in some buildings and homes lead levels in water may go up due to the kind of pipes and plumbing fixtures used in those structures.

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 water service lines and home plumbing. Fort Wayne City Utilities 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 in home plumbing for several hours, lead may enter the water from plumbing fixtures. 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 at least until you can feel the water get noticeably cooler 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 steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at www.epa.gov/safewater/lead. You may also contact Fort Wayne City Utilities at 311 or visit our website at www.cityoffortwayne/ utilities or contact the Indiana State Department of Health at (317)

233-1250 or the Fort Wayne - Allen County Department of Health at (260) 449-8600 for more information on health risks and on reducing lead exposure.



CITY UTILITIES' MISSION

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

Softness and pH Level

The hardness of water is determined by the amount of calcium and magnesium it contains. These minerals occur naturally in river water. Early in the treatment process, City Utilities adds powdered calcium hydroxide (commonly known as lime) to the water as a softener. The lime causes a chemical reaction that changes dissolved calcium and magnesium to an insoluble form, so then it can be removed by the settling process.

The hardness of water is measured in milligrams of calcium and magnesium per liter of water. Very soft water may have from 0–75 mg/L of hardness. Hard water has between 150 and 300 mg/L. After softening, Fort Wayne's water had an average hardness of 122 mg/L in 2014. With moderately soft water, soaps and detergents create more suds so you can use less. Keeping water at a moderately soft level helps to avoid some of the pipe

corrosion problems that can occur with excessively soft water.

The pH of water, or the balance between acidity and alkalinity, is another important factor in preventing water pipe corrosion. Fort Wayne implements a state mandated corrosion control program that requires that water leaving the water plant must have a pH level of between 8.3 and 9.3.

