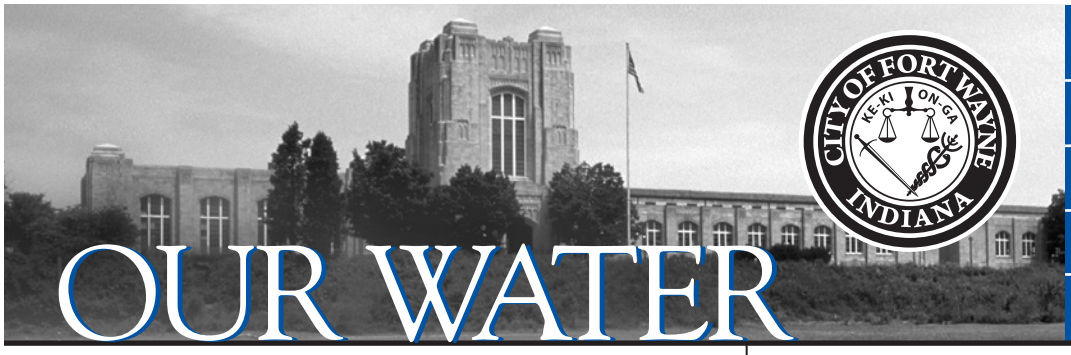

2016 Annual Drinking Water Quality Report Fort Wayne City Utilities

2015 – Another Great Year for Water Quality in Fort Wayne

Fort Wayne City Utilities is pleased to present this annual water quality report for 2015, which details the outstanding quality of the eleven-BILLION gallons of water we treated and distributed to our customers. Water safety is City Utilities top priority and the test results presented in this report demonstrate that in 2015, your drinking water met or was better than all of the water quality standards established by the US Environmental Protection Agency.

Lead – Getting National Attention

Lead levels in drinking water received national attention in 2015. This underscores that as a water provider, City Utilities' first priority is to protect the health and safety of the customers we serve. The federal regulation that addresses lead in drinking water is currently under revision and water utilities across the country are evaluating plans to remove all lead service lines over a period of time.

Lead is a common, naturally occurring metal found in the environment. Lead seldom occurs naturally in water supplies such as rivers and lakes, and lead is rarely present in water coming from drinking water treatment plants. Lead enters drinking water primarily as a result of corrosion or the wearing away of materials in building plumbing fixtures or in the service lines that transport water from publicly owned water lines to individual buildings. According to the US Environmental Protection Agency: "the greatest exposure to lead is swallowing or breathing lead paint chips or dust." The Fort Wayne-Allen County Department of Health agrees that exposure to lead in paint is a much greater risk than any lead that could be contained in drinking water.

Eight national water industry organizations – Fort Wayne City Utilities belongs to several of these – recently issued a statement that points out the massive need in the United States for improving water infrastructure: "We must also help shape a broader dialogue on…the appropriate steps to guarantee a sustainable and strong local-state-federal partnership to address them. We also understand that affordability issues are playing a larger role in providing fundamental drinking water and clean water services to our communities, and that this too will need to be a key topic in this broader discussion."

As required by state and federal regulatory agencies, Fort Wayne City Utilities regularly tests water from a number of homes in the community to monitor the amount of lead that may be found in drinking water. Lead tests in Fort Wayne during the last three monitoring periods were below levels where any action is required by federal regulators. Because of this Fort Wayne is not required to test for lead in water for the next three years. However, as part of our ongoing commitment to providing high quality, safe drinking water, City Utilities will continue to monitor lead levels in water samples taken around the community.

Fort Wayne does take action to help ensure the level of lead in drinking water in homes and businesses remains at or below an acceptable level. Fort Wayne uses a corrosion control program that requires water leaving the Water Filtration Plant to have a pH level of between 8.3 and 9.3. The pH of water, or the balance between acidity and alkalinity, is an important factor in preventing water pipe corrosion and controlling lead levels. A neutral pH is 7. Numbers below 7 indicate water is more acidic, which can lead to pipe corrosion. At the level required in City Utilities' water, the pH level is more alkaline than acidic and therefore is less likely to cause lead pipe corrosion.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from components associated with water service lines and building plumbing. City Utilities is responsible for providing high quality drinking water and water coming from the water filtration plant and its piping system meets or is better than all state and federal requirements for lead. City Utilities cannot control the variety of materials used in private building plumbing or components that bring water from our main pipes into your house and may cause lead levels in drinking water to go up.

You can also take steps to keep the level of lead in your water low. When your water has been sitting in your home or business 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 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 or at www.DrinkTap.org. 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.

Flavored Water?

City Utilities is committed to providing you with water that is safe to drink, but we also want it to be crystal clear and great tasting. The water's taste and odor is measured at least weekly – more often when changing river conditions could cause an unpleasant flavor or smell. Taste and odor are monitored and reported using a Flavor Profile Number (FPN). Our goal is to keep the water we send out at a FPN of 3 or lower on a scale of 1 to10 – where 1 indicates completely tasteless and odorless water.

Fort Wayne's water comes from the St. Joseph River – a natural system. Sometimes during the spring or fall – especially after a heavy snow has melted, when leaves are falling or when rain causes runoff and rising river levels – the river water we use may take on a musty odor. This is often caused by organic matter breaking down in the water. Water treatment technicians at the Water Filtration Plant try to anticipate these conditions and begin adding powdered activated carbon (PAC) to manage the taste and odor in the water. The use of PAC in the treatment process helps to remove taste and odor, but it can only do so much. Despite our best efforts, there may be times when you notice a taste or odor in the water. Chilling the water before you drink it can make the taste and odor less noticeable, so consider putting water in a pitcher in the refrigerator and using very cold water for drinking when the water system is going through a taste and odor event. You may find the weekly Flavor Profile Number for finished water on the City Utilities website.

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, spring, 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 materials. It also 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, 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 the use of chemical treatment, filtration and disinfection using ultraviolet light, remove or significantly reduce these contaminants, making the water safe to drink when it meets regulatory standards. Fort Wayne's water consistently meets or is better than those standards require.

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.

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.

In 2014 Fort Wayne City Utilities added a new water disinfection process that uses ultraviolet light 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 before the water is sent to you. In 2015 the highest level of Cryptosporidium found in the river water coming into the water filtration plant was 0.364 per liter of water. This means that at any time during the year any liter of water that came into the plant had less than a 33% chance of containing any Cryptosporidium. Put another way, three liters of river water (think about the amount in one and one half 2-liter bottles of soda) might occasionally contain one Cryptosporidium organism. No Cryptosporidium was found in the drinking water that City Utilities sent out to its customers, as is required by federal standards. This means that 100% of the time, City Utilities water treatment process was able to remove or deactivate these "germs."

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.

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, 2015. Results of all tests performed in 2015 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.

Check the City Utilities website at www.cityoffortwayne.org/utilities for much more information.

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	2.20	1.21 - 2.20	Additive used in water treatment process to control bacteria
Chlorine Dioxide	ppb	800	800	Yes	380	38 - 380	Additive used in water treatment process to control bacteria
Chlorite	ppm	0.8	1	Yes	0.981	0.360 - 0.981	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	ppb	NA	60	Yes	33.15	2.9 - 51.0	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 51.0 was 30.68
Total Organic Carbon (TOC)	mg/L	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
TTHMs (Total Trihalomethanes)	ppb	NA	80	Yes	35.05	13.3 - 58.5	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 58.5 was 35.05
Inorganic Compounds							
Fluoride	ppm	4	4	Yes	1.05	0.51 - 1.05	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	10	Yes	3.08	0.105 - 3.08	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	1	Yes	0.021	<0.005 - 0.021	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Sodium	ppm	0	none	NA	68	10 - 68	Naturally present in the environment
Barium	ppm	2	2	Yes	0.027	0.0071 - 0.027	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	ppm	NA	0.1	Yes	0.001	0 - 0.001	Discharge from steel and pulp mills; Erosion of natural deposits
Sulfate	ppm	NA	NA	NA	59	Only one test is required per year	Naturally occurring compound
Microbiological Contaminants							
Total Coliform	% of positive samples monthly	0	5	Yes	1.68	0.0 - 1.68	Naturally present in the environment
Turbidity	% of samples below 0.3 NTU	100	95	Yes	100	NA	Soil runoff
Turbidity	Highest single measurement in NTU	NA	TT	Yes	0.14	NA	Soil runoff
Cryptosporidium	oocysts/100 L	0	TT	Yes	0	NA	Human and animal fecal waste
Volatile Organic Compounds							
NA							
Synthetic Organic Compounds							
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	0.3	0.0 - 0.03	Runoff of herbicide used on row crops
Metolachlor	ppb	NA	NA	NA	0.1	0.0 - 0.10	Runoff of herbicide used on row crops
Unregulated Compounds							
Dicamba	ppb	NA	NA	NA	0.2	0.0 - 0.20	Runoff of herbicide used on row crops
Inorganic Contaminants						**90th percentile**	
Copper	Last testing period was 2014	ppm	1.3	90% of samples taken below AL = 1.3	Yes	0.125	Samples taken = 52 samples Exceeding AL = 0	Erosion of natural deposits; Corrosion of household plumbing systems
Lead	Last testing period was 2014	ppb	0	90% of samples taken below AL = 15	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

www.cityoffortwayne.org

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

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 espagnol: 311.

Fort Wayne Softens the Water For You

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 some can be removed.

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 120.41 mg/L in 2015 and is considered moderately soft. With moderately soft water, soaps and detergents create more suds so you can use less. Keeping water at a moderately soft level avoids some of the pipe corrosion problems that can occur with excessively soft water. Softer water has also been found to extend the life of water-using appliances such as ice makers and dishwashers by as much as 30% and to help clothing stay brighter and last longer.

Where does Fort Wayne's drinking water come from?

The St. Joseph River is the sole 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.

Fort Wayne draws an average of about 34 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.

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 hydrological conditions that may affect the susceptibility of the water supply to potential contaminants. More information concerning this Source Water Assessment may be obtained by contacting the Superintendent of the Three Rivers Water Filtration Plant, Chet Shastri, at (260) 427-1338.

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, and 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.