2013 Annual Drinking Water Quality Report Fort Wayne City Utilities

Fort Wayne's Water Quality in 2012 The results are in and as always, the news is good!

To ensure that tap water is safe to drink, the United States Environmental Protection Agency (US EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. In 2012 as in past years, the tap water provided to customers of Fort Wayne City Utilities met – or was better than – all US EPA and state water quality standards. We go over and above the requirements to ensure that your water is safe.

The chemists and operators at the Three Rivers Water Filtration Plant test for nearly 120 substances in the water before, during and after the water is treated for your use. City Utilities also collects water samples from many locations in the community to monitor the quality of water as it travels to your home or business.

This report, which is required annually by the EPA and Indiana Department of Environmental Management (IDEM), provides a snapshot of our water quality in 2012. We've included information about where your water comes from, what it contains and how it compares with US EPA and state standards. City Utilities is committed to providing you with this information – along with plenty of safe drinking water – because we know you rely on us every day. We are happy to receive your comments and questions through the 311 – One Call to City Hall service center or via email at waterquality@cityoffortwayne.org.

Investing in Our Water System

Water is a vital service that touches every life in Fort Wayne every day. Just try to imagine a day without water for drinking, cooking, bathing and fire fighting. To ensure the reliability and safety of our water supply and our water distribution system, and to meet federal regulatory requirements, City Utilities must invest in new infrastructure, upgrade existing facilities, and replace vulnerable parts of the water system before they fail. These investments help to ensure you will receive continuous, high quality water service now and into the future.

If you've driven past the Filtration Plant anytime in the past 2 years, you've seen on-going construction there. The project – which will wrap up in late summer 2013 – was required by the federal government and involves the installation of an ultraviolet treatment system for disinfecting drinking water. The project represents a $22 million investment.

While City Utilities can produce plenty of water, water main breaks can sometimes disrupt service to customers, causing frustrations and inconveniences. Water main breaks are costly to repair and can result in street pavement deterioration, particularly if a main breaks repeatedly in the same area.

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Dear Valued Customers,

On behalf of the employees of City Utilities, I'm pleased to present our annual water quality report for 2012. It includes important information about where your water comes from, what it contains and how it compares with US EPA and state standards.

City Utilities' mission is to support public safety and public health and to enhance regional economic development. We do this by producing and delivering an abundant and reliable supply of water for drinking, cooking, bathing, fighting fires and many other uses. Often businesses make decisions about where they will locate and grow based on the ability of the water utility to provide an affordable supply of high quality water. We're pleased to be part of the reason so many businesses stay and grow here in the Northeast Indiana region.

We operate and maintain 1,159 miles of water main and nine water storage tanks to ensure good water flow and pressure. With all we do, our water remains a great value. Water fees paid by customers are our only source of income (we receive no property tax funding). Yet City Utilities' bills remain among the lowest in Indiana and in the 12-county region around us.

I welcome your feedback and your ideas on how City Utilities can better serve you. Please share your thoughts with me at anytime by emailing me at waterquality@cityoffortwayne.org.

Sincerely,
Kumar Menon
Director of City Utilities

Reducing water main breaks requires a pro-active investment in water main replacement. City Utilities has a program to replace deteriorating mains, but funding has not been available to do as much as we would like. We need to replace 1% of our water mains each year – or about 12 miles. Thanks to your support and City Council's leadership, over the next few years, we'll go from replacing just three or four miles annually to proactively replacing an average of nine miles of main annually – an investment of about $5 million per year. We need to do more main replacement in the future, but it will take several years before we can expect the number of breaks per year to start going down.

Aviso Importante

Este reporte contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted ó hable con alguien que lo entienda. En Español: 311.

Testing Our Water — The US EPA and the State of Indiana require City Utilities to test the drinking water we produce regularly to make sure that it remains safe. The table below shows substances that are regulated by the US EPA and that we detected in our finished drinking water between January 1 and December 31, 2012. Results of all tests performed in 2012 were better than federal and state standards require.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants in drinking water does not necessarily indicate that the 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 1-800-426-4791.

We also test for some contaminants 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. City Utilities tests for many other substances, but because they were not detected, they are not reported here. Some tests are only required once a year because 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.

Water Quality Table

Contaminants	Units	MCLG	MCL	Detected Level in Your Water	Range	Typical Sources
Disinfectants & Disinfection By-Products						
Chlorine	ppm	4	4	1.88	0.62 - 1.88	Additive used in treatment process to control bacteria
Chlorine Dioxide	ppb	800	800	480	14 - 480	Additive used in treatment process to control bacteria
Chlorite	ppm	0.8	1	0.927	0.060 - 0.927	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	ppb	NA	60	33.1	4.7 - 40.7	By-product of drinking water chlorination
Total Organic Carbon	mg/L	NA	TT	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	45.8	6.8 - 84.5	By-product of drinking water disinfection NOTE: Compliance is based on each location's running annual average. The location running annual average for the site with 84.5 was 45.8
Inorganic Compounds						
Fluoride	ppm	4	4	1.80	0.011 - 1.80	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	10	1.92	0.126 - 1.92	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	1	0.004	<0.00 - 0.004	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Sodium	ppm	0	none	37	14 - 37	Naturally present in the environment
Barium	ppm	2	2	0.011	0.004 - 0.011	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Microbiological Contaminants						
Total Coliform	% of positive samples monthly	0	5	1.15	0.0 - 1.15	Naturally present in the environment
Turbidity	% of samples below TT of 0.3 NTU	100	95	100	100.0 - 100.0	Soil runoff
	highest single measurement NTU	NA	TT	0.27	NA	
Cryptosporidium	oocysts/100 L	0	TT	0	NA	Human and animal fecal waste
Source (Raw) Water Cryptosporidium	oocysts/L	-	-		<0.087 - 0.533	
Synthetic Organic Compounds						
Atrazine	ppb	3	3	0.7	<0.2 - 0.7	Runoff of herbicide used on row crops
Unregulated Compounds						
Metolachlor	ppb	NA	HA=3.5	0.4	< 0.1 - 0.4	Farm runoff
Sulfate	ppm	NA	HA=500	42	Only one test is required per year	Naturally occurring compound
Inorganic Contaminants						
Copper	ppm	1.3	90% of samples taken below AL = 1.3	0.0898	Samples taken = 50 samples Exceeding AL = 0	Erosion of natural deposits; Corrosion of household plumbing systems
Lead	ppb	0	90% of samples taken below AL = 15	7.9	Samples taken = 50 samples Exceeding AL = 1	Corrosion of household plumbing systems; Erosion of natural deposits

Fort Wayne Softens the Water For You — Customers of City Utilities receive water that has been "pre-softened" by the addition of lime in the treatment process at the Filtration Plant. Because the water has already been softened when it reaches your home, most City Utilities' customers elect not to use a home water-softening device. This additional step of softening can save you $10 to $20 per month in softening costs, and extends the life of your major water-using appliances by as much as 30%. Fort Wayne's drinking water is rated as moderately soft with an average hardness in 2012 of 113 mg/L. Unsoftened well water in the Fort Wayne area typically ranges in hardness from about 121-180 mg/L.

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.

Health Information from the US EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines 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.

Cryptosporidium is a microbial pathogen found in surface water such as rivers, lakes and streams throughout the U.S. Although filtration removes Cryptosporidium, the most commonly used filtration methods cannot guarantee 100% removal. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing illness. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of the infection include nausea, diarrhea and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children and the elderly are at greater risk for developing life-threatening illness. We encourage immune-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Fort Wayne City Utilities tests water from the St. Joseph River for the pathogen Cryptosporidium. In 2012 the highest level of Cryptosporidium found in the river was 0.533 oocysts per liter of water. No Cryptosporidium was found in the drinking water that City Utilities sent out to its customers.

Keeping Your Drinking Water Safe

In order to ensure that tap water is safe to drink, the US EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water system 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 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, 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.

Fort Wayne City Utilities
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Fort Wayne, IN 46802

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Important Information Sources:

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

Or 311

By email:
waterquality@cityoffortwayne.org

EPA's Safe Drinking Water Hotline
1-800-426-479

www.epa.gov/drink/

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 the City'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 because of 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 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/drink-water 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.

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.

Protecting Water Quality

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.

ST. JOSEPH RIVER WATERSHED INITIATIVE
PARTNERSHIP