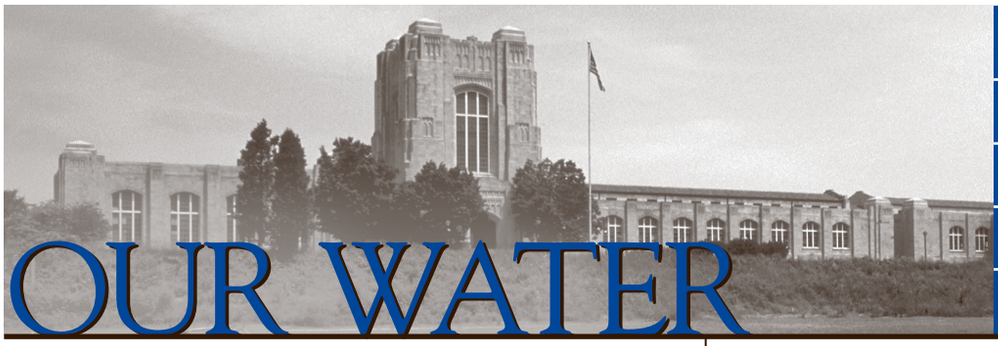

2011 Annual Drinking Water Quality Report Fort Wayne City Utilities

Safe Water: You Expect It – We Deliver It

The Three Rivers Water Filtration Plant produced just over 11 billion gallons of clean filtered drinking water in 2010. In 2010, as in past years, the tap water provided to customers of Fort Wayne City Utilities met – or was better than – all Environmental Protection Agency (EPA) and state water quality standards require. We go over and above the requirements to ensure that your water is safe.

City Utilities operates and maintains 1,159 miles of water main and 9 water storage tanks that help ensure good water flow and pressure. Our only source of income is the water bills that our customers pay. Fort Wayne's water rate is among the lowest in Indiana and in the 12 county region around us.

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 systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 tap.

This report, which is required annually by the US EPA and Indiana Department of Environmental Management (IDEM), provides a snapshot of our water quality in 2010. 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.

Plans Underway for New Water Treatment Process

Fort Wayne City Utilities has a long and proud history of providing drinking water that meets—or is better than – federal and state regulations require. Our commitment to water quality has been recognized by the national Partnership for Safe Water every year for the past 10 years.

However, a new federal drinking water regulation is requiring City Utilities to treat our water to an even higher standard. The new rule focuses on a pathogen called *Cryptosporidium* (you can read more about *Cryptosporidium* on page 4 of this report). City Utilities has been testing river water and our finished drinking water for this organism for a number of years. While we have occasionally found tiny amounts of *Crypto* in river water, it has not been found in our treated drinking water. Despite our record, the EPA is requiring that we increase our ability to eliminate *Crypto*. Fort Wayne is not the only water utility facing this new federal mandate. Many public water utilities that use a surface water body such as a river, lake or reservoir as their drinking water source are facing the same new requirements.

In 2014, Fort Wayne's Filtration Plant will begin using ultraviolet light as our primary method of disinfecting drinking water. Currently our primary disinfectant is chlorine dioxide. The change will increase the effectiveness of our treatment process from 99% to 99.9%. The new equipment will be installed within the existing footprint of the Water Filtration Plant. Financing for the $22 million project is in place and will not require an increase in water rates.

Dear City Utilities Water Customers,

Where would we be without water? Water is essential for life and important to the quality of our lives.

Because water provided by Fort Wayne City Utilities is always there when we turn on the tap, most of us don't think about where it comes from or how it gets to us. As Mayor, I've learned a lot about what's required to keep our water system running. It takes dedicated employees and a commitment to good stewardship of our infrastructure.

Water from Fort Wayne City Utilities is a great value. Just a penny will buy you 5-gallons of safe, clean water delivered right to your home. I never want to see a fire occur in the City, but when they do happen, you can be sure City Utilities will supply plenty of water at an adequate pressure to help the Fire Department minimize property loss. The ISO – an agency that rates the effectiveness of fire departments across the country – rates us among the best communities in the nation for fire protection. That rating helps keep your property insurance costs down.

Our water system also helps our economy grow. Businesses look for communities with great water at a reasonable cost when they make decisions about where they will locate or expand. So maintaining the best water system possible is an absolute essential.

City Utilities and I are committed to making sure you have great water at a reasonable cost. That's part of making Fort Wayne a place where good jobs can grow and families can thrive. I hope you'll take a few minutes to review this annual water quality report to learn more about the great water we have here.

Sincerely,

Tom Henry, Mayor

We Keep the Water Flowing

In addition to keeping Fort Wayne's water safe by treating and testing it, City Utilities is also committed to delivering that water when our customers want and need it. That means when a water main breaks or leaks, we make the repair as quickly and cost effectively as possible.

2010 was a record year for water main breaks in Fort Wayne with 527 breaks requiring repair. We've seen the number of main breaks per year increase in almost every year since 2000; that's because the mains in the ground are getting older and older mains are more likely to break.

City Utilities has a program to replace deteriorating mains, but funding has not been available to do as much as we would like. Our goal is to replace 0.5% of our water mains each year – that's about 6 miles. But we only had enough money in 2010 to replace about 0.25%.

Testing Our Water — The US EPA and the State of Indiana require Fort Wayne City Utilities to regularly test the drinking water we produce to make sure that it remains safe. Results of all tests performed in 2010 were better than federal and state standards require. The table below shows substances that are regulated by the EPA and that we detected in our finished drinking water between January 1 and December 31, 2010. Drinking water, including bottled water, may reasonably be expected to contain trace amounts of contaminants. The presence of these contaminants in drinking water does not 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 test for some contaminants that are not regulated because this is one of the best things we can do to ensure your water remains safe. Monitoring unregulated contaminants helps the US EPA determine where certain contaminants occur and whether the Agency should consider regulating those in the future. The City also 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	1.74	1.15 - 1.74	Additive used in treatment process to control bacteria
Chlorine Dioxide	ppb	800	800	270	40 - 270	Additive used in treatment process to control bacteria
Chlorite	ppm	0.8	1	0.984	0.421 - 0.984	By-product of drinking water disinfection
Haloacetic Acids (HAA5)	ppb	NA	60	41.4	7.7 - 41.4	By-product of drinking water disinfection
Total Organic Carbon	mg/L	NA	TT	The percentage of TOC was measured each month and the system met all TOC removal requirements	NA	Naturally present in the environment
TTHMs (Total Trihalomethanes)	ppb	NA	80	66.6	5.5 - 66.6	By-product of drinking water disinfection
Inorganic Compounds						
Fluoride	ppm	4	4	1.82	0.52 - 1.82	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	10	2.78	0.19 - 2.78	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	1	0.022	0 - 0.022	Runoff from fertilizer use; Leaching from septic systems; Sewage discharge; Erosion of natural deposits
Sodium	ppm	0	HA = 500	66	3.6 - 66.0	Naturally present in the environment
Microbial Contaminants						
Total Coliform	% of positive samples monthly	0	5	0.58	0.0 - 0.58	Naturally present in the environment
Turbidity	% of samples below TT of 0.3 NTU	100	95	100% of the samples were below the TT level of 0.3 NTU. The highest single measurement was 0.13 NTU. Any single measurement in excess of 1 NTU would constitute a violation unless approved by the State.		Soil runoff
Cryptosporidium	oocysts/100 L	0	TT	0	NA	Human and animal fecal waste
Synthetic Organic Compounds						
Atrazine	ppb	3	3	0.5	0 - 0.5	Runoff of herbicide used on row crops
Unregulated Compounds						
Metolachlor	ppb	NA	HA = 3.5	0.1	< 0 - 0.1	Farm runoff
Sulfate	ppm	NA	HA = 500	63	Only one test is required per year	Naturally occurring compound
Volatile Organic Compounds						
Vinyl Chloride	ppb	0	2	0.3	< 0.20 - 0.30	Leaching from PVC piping; Discharge from plastics factories
Inorganic Contaminants						
Copper	ppm	1.3	90% of samples taken below AL = 1.3	0.089	Samples taken = 51 samples Exceeding AL – 0	Erosion of natural deposits; Corrosion of household plumbing systems
Lead	ppb	0	90% of samples taken below AL = 15	23	Samples taken = 117 samples Exceeding AL – 17	Corrosion of household plumbing systems; Erosion of natural deposits

Measuring Taste and Odor — You expect that Fort Wayne's water will be safe, but you also want it to be odor-free and taste good. We work hard every day to meet your expectations. Because our water comes from the St. Joseph River, weather and other conditions can cause water to have a taste or odor. These may be the result of algae in the river during hot weather, lots of rain in the spring or leaves falling into the river in autumn. Tastes and odors in drinking water typically do not pose any kind of threat to public health, but they can be bothersome.

The laboratory at the Three Rivers Filtration Plant uses a standard method to measure these somewhat subjective characteristics. Taste and odor in water are measured using a Flavor Profile Analysis. A panel of trained judges tastes the water and lists the tastes they can detect. Based on test results, activated carbon is used in the treatment process to remove taste and odor.

Information on the results of taste and odor tests is reported weekly on the City's website at http://www.cityoffortwayne.org/utilities/water-quality-report.html.

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.

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. Better river water coming in means lower costs to produce clean, safe drinking water for you.

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.

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 St. Joe 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.

Bottled Water or Tap Water?

Does a label on a bottle of water make it better, safer or healthier than tap water? Typically a label just makes the water more expensive than the water that comes from City Utilities through your tap. While most water bottlers have consistent standards and quality control, bottled water has not been shown to be any safer than tap water.

Producing bottled water uses about 17 million barrels of oil every year, not including the energy used to transport the bottles to market. This releases over 2.5 million tons of carbon dioxide. The total amount of energy embedded in the production, transportation and use of bottled water is equivalent to filling the bottle one-quarter full of oil. (The Pacific Institute)

Bottled water costs A LOT. At $1.50 for one cold 20-ounce bottle of water from a vending machine, buying enough bottles to make a gallon of water would cost $9.60. That's more than twice the cost of a gallon of gasoline. Even if you get a great deal on bottled water at the store and pay 50-cents per 20-ounce bottle, **a gallon would cost $3.20.** Over 90% of the cost of bottled water pays for the bottle, the lid and the label.

A whole gallon of water from the tap in Fort Wayne costs only a fifth of a penny – just 0.2-cents a gallon (not including availability charge). **So for that same $3.20, you could have 1,600 gallons of Fort Wayne City water delivered directly to your tap and available 24-hours a day.**

Keeping Your Water Safe Water

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 poorly maintained 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.

The Indiana Department of Environmental Management has performed an assessment of Fort Wayne's water source – the St. Joseph River. A copy of the report may be obtained from City Utilities by calling 427-1381.

Fort Wayne City Utilities
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/

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 lead levels in water may go up because of the kind of pipes and plumbing fixtures used. Fort Wayne found high levels of lead in drinking water in some homes.

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. There are many other sources of lead including lead-based paint typically used prior to 1978, food and liquid stored in lead crystal or lead-glazed pottery, and old painted toys just to name a few.

When water sits 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 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.

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 and infants can be particularly at risk for 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 (known also as *Crypto*)is a microbial pathogen found in 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. Live *Cryptosporidium* oocysts must be ingested to cause disease, and it may be spread through means other than drinking water. Most healthy individuals who become infected can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing a life threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection.

Fort Wayne City Utilities regularly tests water from the St. Joseph River for the presence of *Cryptosporidium*. In 2010 the highest level found in river water was 0.4 oocysts per liter of water. Current testing methods cannot determine if the *Crypto* organisms are dead or if they are capable of causing disease. **No *Cryptosporidium*** was found in the treated water that City Utilities distributed to you. This is important because it shows that the Fort Wayne treatment process is effective at removing this pathogen. While City Utilities is not aware of specific sources of the parasite, it may come from wildlife or from animals grazing near the river.

Although the water filtration process removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Many water utilities that take their water from surface water sources are being required to implement additional treatment technologies to deactivate *Crypto*. In 2014, Fort Wayne will change to water disinfection using ultraviolet light. You can read more about the switch on page 1 of this report.