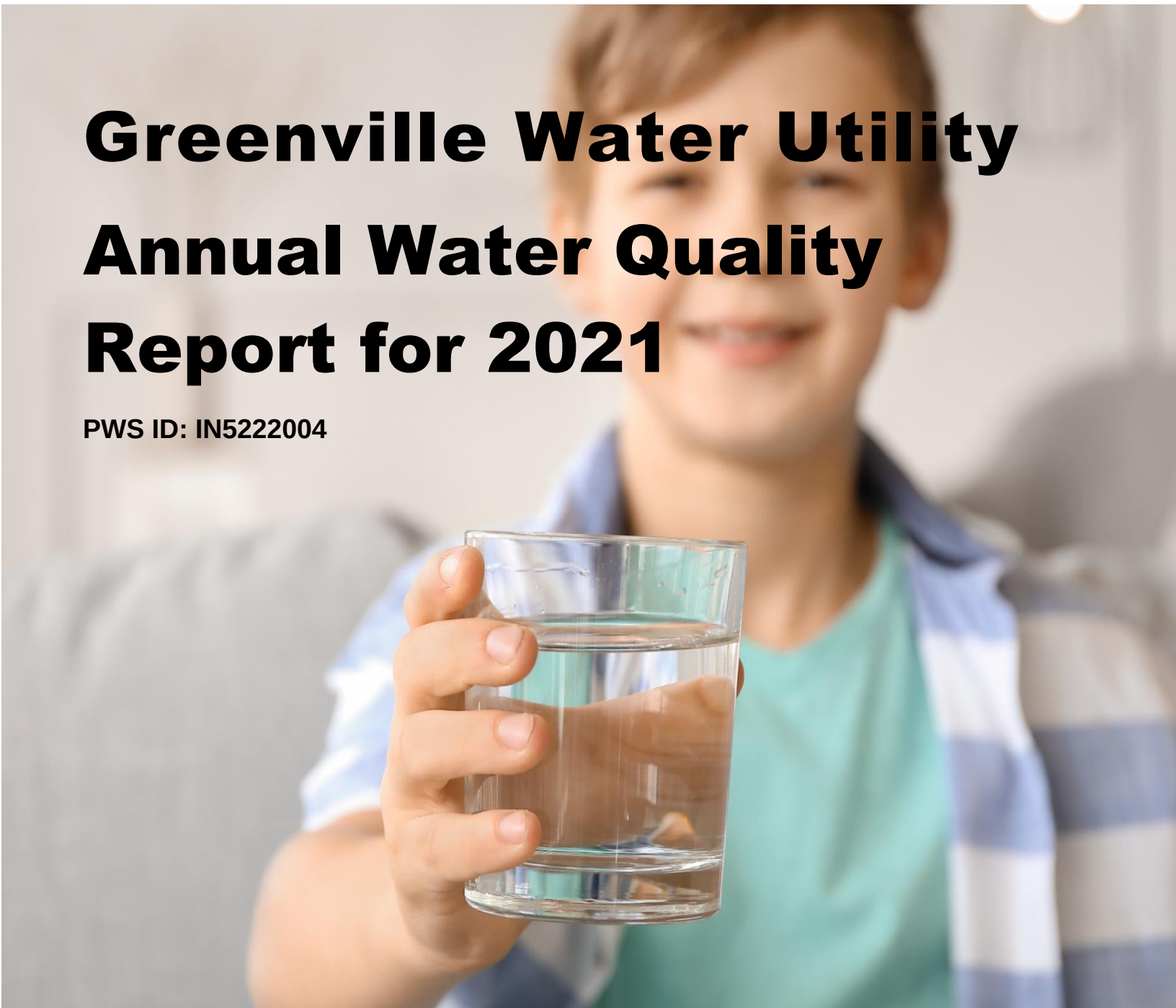
Greenville Water Utility



Greenville Water Utility

Annual Water Quality Report for 2021

PWS ID: IN5222004

A Message From Your Town Council and Water Board President

Dear Community,

This is your annual report about your drinking water quality, also called a Consumer Confidence Report or CCR. Having clean, safe water is one of the most important services we provide, and we want you to be as informed as possible about your drinking water.

This report is intended to provide peace of mind and confidence in your drinking water. Here we explain where you water comes from, the results of sampling that we have performed, and what we are doing to protect you and your family. We are proud to report that the water we provide to you has met all federal and state requirements in 2021.

If upon reading this report, you have any questions, or don't feel that peace of mind, please reach out. You may contact us at (812) 923-9821 or gredden@visitgreenvillein.com.

Sincerely,

Greg Redden
812-923-9821
gredden@visitgreenvillein.com

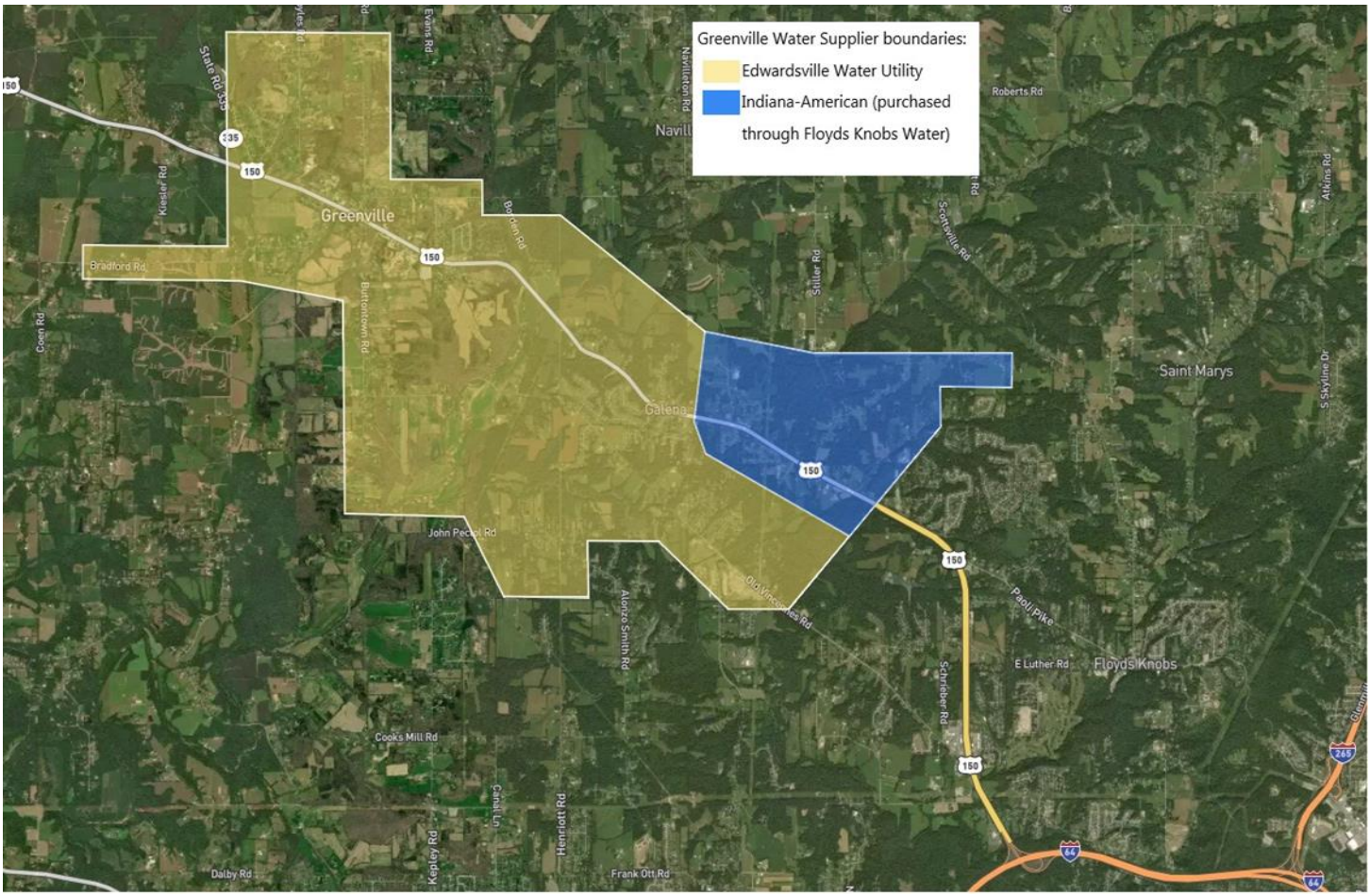
About Your Water

Where Your Drinking Water Comes From

Most drinking water in the United States comes from a river, a lake, or from an underground well. The water we provide to you comes from wells located in a sand and gravel aquifer adjacent to the Ohio River. This is purchased from the Edwardsville Water Corporation. We also purchase water from Floyds Knobs Water Company. This water is treated by Indiana-American Water which has wells in Clark County.

How Does This Affect You?

The map below shows the different areas each supplier serves in our community. Where you live will determine the water source for your home. By identifying your neighborhood on the map, you can focus on the water quality information that's most important to you in the tables on pages 8-11.



We Protect the Source

Sources of water, whether surface or groundwater, are continually being impacted by the surrounding communities. The most effective way to prevent contamination of our water sources is to educate people about potential contamination sources and how to minimize or eliminate them completely.

What Is in Your Drinking Water

The sources of drinking water (both tap water and bottled water) 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, 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 uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products 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.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can

be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 800-426-4791.

Sampling and Testing

We take more than 60 samples across our water system per year. We’re looking for bacteria, metals, and chemicals to make sure the water continues to be safe to drink.

Bacteria

We look for bacteria regularly, as required by law, and there are 11 locations in the water system where we take samples for analysis. More thorough testing, evaluation, and action is required if bacteria are found in even a small percentage of tests.

Disinfection by-products (Trihalomethane (THM) or Haloacetic Acids (HAA))

Each year we look for byproducts of the disinfection process. When chlorine, the disinfectant we use to protect against the water of bacteria and viruses, starts to break down in the water, it can form new compounds. These compounds, trihalomethanes (THM) and haloacetic acid (HAA), have been known to cause cancer at high levels. The legal limit for drinking water is 80 parts per billion and 60 parts per billion respectively. We test for these compounds at 2 different locations in the water system.

Lead and Copper

We take water samples from 20 different homes in our system every 3 years to test them for lead and copper. More information about the lead and copper levels found in our water can be found on page 8. 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 service lines and home plumbing. We cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Your Water Meets All Standards

In the tables on pages 8-11, you will find all the substances that we detected in your drinking water. Here, we would like to highlight a few substances that we pay close attention to in our water because of their potential effects on public health:

Lead ***Tested throughout the Greenville Water System. Testing is done every 3 years. Most recent tests were done in 2021.***	
Amount We Found	**1.19 ppb**
Ideal Goal (MCLG)	0 ppb
90th Percentile	1.19 ppb
Action Level	15 ppb
Source: Corrosion of household plumbing systems. Erosion of natural deposits	
Violation	**No**

Total Trihalomethanes[1] ***Tested throughout the Greenville Water Utility. This is sampled for on a yearly basis***	
Amount We Found	**19 ppb**
Highest Level Allowed (MCL)	80 ppb
Range of Levels Detected	17-19 ppb
Source: By-product of drinking water disinfection	
Violation	No

Copper ***Tested throughout the Greenville Water System. Testing is done every 3 years. Most recent tests were done in 2021.***	
Amount We Found	**0.683 ppm**
Ideal Goal (MCLG)	1.0 ppm
90th Percentile	0.683 ppm
Action Level	1.3 ppm
Source: Source: Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems	
Violation	**No**

Total Haloacetic Acids ***Tested throughout the Greenville Water System. This is sampled for on a yearly basis***	
Amount We Found	**1.7 ppb**
Ideal Goal (MCLG)	No goal
Highest Level Allowed (MCL)	60 ppb
Range of Levels Detected	1.7-1.7 ppb
Source: By-product of drinking water disinfection	XX
Violation	**No**

[1] Compliance is based on the running annual average at each location (LRAA). The Highest LRAA reflects the highest average at any location and the Range Detected reflects all samples used to calculate the running annual averages.

Stay Informed About Your Water

Monthly Board Meetings

We need your understanding and support to be successful, so we hope you will get involved with us all the ways you can on projects, programs, and policies. You are welcome to attend our Board meetings. We meet on the second Monday of each month at Greenville Town Hall. A meeting agenda is posted at our website before each meeting. We always make time to hear from guests and answer questions so please join us to learn more about what we're working on. Your input is important to us! (www.visitgreenvillein.com)

Projects and Rates

Infrastructure projects and our rates go hand in hand. We can't keep the system in top shape without your help, so we want you to be as informed as possible about what we need and why. Check out our website at www.visitgreenvillein.com to learn about projects and ways you can have input to them.

Contact us at (812) 923-9821, gredden@visitgreenvillein.com, or at our website www.visitgreenvillein.com

Your Role in Water Quality

Check Your Home or Business' Plumbing for Lead and Copper

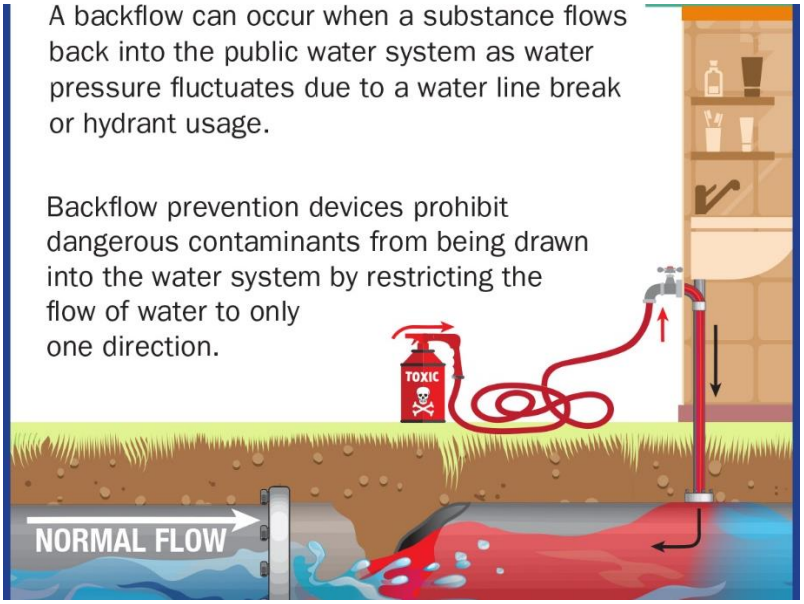
We work hard to provide high quality water when it arrives on your property. Once the water we provide passes through the meter on your property however, it is exposed to a whole new environment in your home that we have no control over. But you do.

Some of the things that can change the water quality on your property include your plumbing and pipe material, how long you go without running the water, and whether or how you connect outdoor hoses to your home's water supply. 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 service lines and home plumbing. Greenville Water Utility is responsible for providing high quality drinking water and removing lead pipes, if present, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and

taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Audi Findley at (812)-923-9821 Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead (opens in a new window).

Run Water After Vacation

Another factor that affects water quality in your home is how “stale” the water is. When you leave your home or business for a long time, as you may when you take a vacation, the water in the pipes and plumbing doesn’t move. When water has been sitting in the pipes for days, bacteria can grow, and if you have lead or copper plumbing, those metals can start to seep into the water. The best thing to do when you get back from being away after a long time is to run the water on full blast for 30 seconds to two minutes before using it for drinking or cooking. And always use cold water for cooking, to draw in fresh water from the outside.



Safely Connect Outdoor Hoses

A third factor that can influence water quality in your home are connections to your water outside your home. For instance, the outdoor spigot connection to a hose provides a potential way for pollutants to enter your plumbing. If you use the hose to spray chemicals on your yard by connecting the nozzle to a spray bottle, or if you have a sprinkler system connected, there is the potential for chemicals from the bottle or the lawn to be accidentally sucked back into your internal plumbing. To prevent this from happening, the State of Indiana requires that you have a device installed to prevent that from happening. Please contact us for more information on protecting our community water system from contaminates.

Look Out for Special Populations

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 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 800-426-4791.

Additional Resources

- Information on lead in drinking water: www.epa.gov/safewater/lead (opens in a new window)
- Requirements of the Water Quality Report (also known as the Consumer Confidence Report): http://www.epa.gov/sites/default/files/201405/documents/guide_grg_ccr_2011.pdf (opens in a new window)
- The Safe Drinking Water Act: www.epa.gov/sdwa (opens in a new window)
- CDC Guide to Understanding your CCR: http://www.cdc.gov/healthywater/drinking/public/understanding_ccr.html (opens in a new window)
- American Water Works Association: http://www.awwa.org (opens in a new window)
- Water Environment Federation: http://www.wef.org (opens in a new window)
- Groundwater Information: https://waterdata.usgs.gov/nwis and http://www.epa.gov/ground-water-and-drinking-water/ (opens in a new window)
- Indiana Health Department: (317) 233-1325 | https://www.in.gov/health/

Table of Water Data for 2021

Listed below is a comprehensive summary of the quality of the water we provide to you. Greenville Water Utility purchases all our water from two main suppliers, Edwardsville Water Utility and Indiana-American (purchased through Floyds Knobs Water Utility). These suppliers pump and treat the water at its source. Therefore, they are required to take more samples than Greenville Water Utility. In various tables below the results for each utility are listed separately. If you have any questions about these elements, please contact us.
The samples were taken in 2021 unless noted otherwise.

Lead and Copper – Tested throughout the Greenville Water System. Testing is done every 3 years. Most recent tests were done in 2021. Edwardsville Water Utility and Indiana-American results are included.

Item Detected	EPA's AL - for a representative sampling of customer homes	Ideal Goal (MCLG)	90% of customers' homes were less than	Violation	Source
Lead Greenville Water	15	0 ppb	1.19 ppb	No	Corrosion of household plumbing; Erosion of natural deposits
Lead Edwardsville Water Utility for 2019	15	0 ppb	<1.0 ppb	No	Corrosion of household plumbing; Erosion of natural deposits
Lead Indiana-American	15	0 ppb	0.622 ppb	No	Corrosion of household plumbing; Erosion of natural deposits
Copper Greenville Water	1.3	1.3 ppm	0.683 ppm	No	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives
Copper Edwardsville Water Utility for 2019	1.3	1.3 ppm	0.653 ppm	No	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives
Copper Indiana-American	1.3	1.3 ppm	ND	No	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives

MCL - Maximum Contaminant Level: This is the highest level allowed of a pollutant in drinking water. MCLs are set as close as possible to the goal using the best available technology.
MCLG - Maximum Contaminant Level Goal: The goal level of a pollutant in drinking water. Below this amount, there is no known or expected health effect.
PPB - Part Per Billion = 1 drop of water in an Olympic size swimming pool
PPM - Part Per Million = 1 drop of water in a hot tub

Volatile Organic Contaminants- Greenville is not required to test for these. Edwardsville Water Utility is listed below.

Volatile Organic Contaminants	Collection Date	Highest level Detected	Range of Levels Detected	MCLG	MCL	Violation	Source
Cis-1,2-Dichloroethylene	2020	0.6 ppb	0.6-0.6	70	70	No	Discharge from industrial chemical factories

Coliform Bacteria – Tested throughout the Greenville Water system. Edwardsville Water Utility and Indiana-American are included

Water System Name	Maximum Contaminant Level Goal (MCLG)	Total Coliform Maximum Contaminant Level	Highest Number of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Fecal Coliform or E. Coli Maximum Contaminant Level	Violation	Source
Edwardsville Water Utility	0	0 positive samples	0		0	No	Naturally present in the environment
Indiana-American	0	No more than 5% of monthly samples can be positive per month	1.2		0	No	Naturally present in the environment
Greenville	0	0 positive samples	0		0	No	Naturally present in the environment

Radioactive Contaminants – The Greenville Water Utility is not required to monitor for these elements. Edwardsville Water Utility (ED) and Indiana-American (IAWC) results are included. Both suppliers sampled for these elements in 2017.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Source
Beta/photon emitters* Edwardsville Water	2017	3.1	3.1-3.1	0	4	Mrem/yr	ED No IAWC No	Decay of natural and man-made deposits
Beta/photon emitters* Indiana-American	2017	.3	.3-.3	0	4	Mrem/yr	No	Decay of natural and man-made deposits
Uranium Edwardsville Water	2017	1.1909	1.1909-1.909	0	30	Ug/l	ED No IAWC No	Erosion of natural deposits
Uranium Indiana-American	2017	0.365	0.365-0.365	0	30	Ug/l	No	Erosion of natural deposits
Gross Alpha (excluding Radon and Uranium)	2017	3.2	3.2-3.2	0	15	pCi/L	ED No IAWC No	Erosion of natural deposits

**** The MCL for Beta/photon emitters is written as 4 mrem/year. EPA considers 50 pCi/L as the level of concern for beta emitters***

Total Chlorine Residual – Monitored throughout the Greenville Water system. Edwardsville Water Utility and Indiana-American results are included. All tests were taken in 2021

Water System	Minimum Disinfectant Residual Level Allowed	Highest Level Detected	Yearly Range	Violation	Source
Greenville Water	4 ppm	1 ppm	1 – 1 ppm	No	Water additive used to control microbes
Edwardsville Water	4 ppm	1 ppm	1 – 1 ppm	No	Water additive used to control microbes
Indiana-American	4 ppm	1 ppm	1 – 1 ppm	No	Water additive used to control microbes

Inorganic Chemicals (IOC) Results below are from our source water systems, Edwardsville Water Utility (ED) and Indiana-American (IAWC). Greenville is not required to sample for these chemicals.

Chemicals Detected	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Range of Test Results for the Year	Violation	Source
Barium Edwardsville Water Utility sampled in 2020	2 ppm	2 ppm	.0289 ppm	.0289 – .0289	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride Edwardsville Water Utility sampled in 2020	4.0 ppm	4 ppm	.587 ppm	.587 – .587	No	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Fluoride Indiana-American sampled in 2021	4.0 ppm	4 ppm	.77 ppm	.77-.77	No	Erosion of natural deposits; Water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen) Edwardsville sampled in 2021	10 ppm	10 ppm	1 ppm	1.41-1.41	No	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrate (measured as Nitrogen) Indiana-American sampled in 2021	10 ppm	10 ppm	.42 ppm	.42-.42	No	Run off from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Thallium (Edwardsville Water Utility sampled in 2017)	2 ppb	0.5 ppb	0.3 ppb	0.3 – 0.3 ppb	No	Discharge from electronics, glass and leaching from ore-processing sites; drug factories

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Disinfection By-products - Monitored throughout the Greenville Water system (GWU). Edwardsville Water Utility (ED) and Indiana-American (IAWC) results are included. All tests were taken in 2021

Disinfection By-product	Highest Level Allowed (MCL) - One Year Average	Maximum Contaminant Level Goal	Highest Level Detected	System Wide Range of Results	Violation	Source
Total Trihalomethanes (TTHMs) Greenville Water	80 ppb	No goal for the total	19 ppb	19-19 ppb	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs) Edwardsville Water	80 ppb	No goal for the total	17 ppb	11-22 ppb	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHMs) Indiana-American	80 ppb	No goal for the total	32 ppb	29.8-32 ppb	No	By-product of drinking water disinfection
Total Haloacetic Acids (THAAs) Greenville Water	60 ppb	No goal for the total	1.7 ppb	1.7-1.7 ppb	No	By-product of drinking water disinfection
Total Haloacetic Acids (THAAs) Edwardsville Water	60 ppb	No goal for the total	1 ppb	0-1.2 ppb	No	By-product of drinking water disinfection
Total Haloacetic Acids (THAAs) Indiana-American	60 ppb	No goal for the total	13.3 ppb	12.6-13.3 ppb	No	By-product of drinking water disinfection

TTHMs - Total Trihalomethanes
THAAs - Total Haloacetic Acids

Unregulated Contaminant Monitoring – Greenville is not required to monitor for these chemicals. Indiana-American results are included.

Chemical	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Source
Sulfate	2018	46.7 ppm	NA	NA	NA	No	Erosion of natural deposits
Sodium	2018	18.8 ppm	NA	NA	NA	No	Naturally occurring
Hardness	2020	182 ppm	137-222 ppm	NA	NA	No	Naturally occurring

NA- Not applicable

In this report, we share the data for all the substances we monitor as required by the Safe Drinking Water Act (SDWA). The law doesn't specify a limit for every potential substance that could be found in the water, so the Environmental Protection Agency (EPA) is constantly studying new potential pollutants (they call them unregulated contaminants) to determine what their affects are on our health, and at what levels, to determine where to set limits for them.

Definitions

MCLG	Maximum Contaminant Level Goal: 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.
MCL	Maximum Contaminant Level: 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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MRDLG	Maximum Residual Disinfectant Level Goal: This is the lowest amount of cleaning chemical drinking water should have, because it is the lowest amount needed to make sure bacteria and viruses can't live.
MRDL	Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
mg/L	Number of milligrams in one liter of water
pCi/L	Picocuries per liter (a measure of radioactivity)
NA	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended
NTU	Nephelometric Turbidity Units: Turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.
PPM	Part Per Million= 1 drop of water in a hot tub
PPB	Part Per Billion = 1 drop of water in an Olympic size swimming pool
PPT	Part Per Trillion (ppt) = 1 drop of water in a lake that's 6 square acres

En español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, contáctenos por correo electrónico a gregredden@visitgreenvillein.com o por teléfono al 812-923-9821.