

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF THE BOARD OF )  
DIRECTORS FOR UTILITIES OF THE )  
DEPARTMENT OF PUBLIC UTILITIES OF THE )  
CITY OF INDIANAPOLIS, AS TRUSTEE OF A )  
PUBLIC CHARITABLE TRUST FOR THE WATER ) CAUSE NO. 45599  
SYSTEM D/B/A CITIZENS WATER FOR )  
APPROVAL OF A LEAD SERVICE LINE )  
REPLACEMENT PLAN PURSUANT TO IND. CODE )  
CH. 8-1-31.6 )

PUBLIC'S EXHIBIT NO. 1

TESTIMONY OF CARL N. SEALS

ON BEHALF OF

THE INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR

October 21, 2021

Respectfully submitted

INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR



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## CERTIFICATE OF SERVICE

This is to certify that a copy of the *Public Exhibit No. 1 – Testimony of Carl N. Seals on behalf of the OUCC* has been served upon the following counsel of record in the captioned proceeding by electronic service on October 21, 2021.

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**TESTIMONY OF OUCC WITNESS CARL N. SEALS**  
**CAUSE NO. 45599**  
**CITIZENS WATER**

**I. INTRODUCTION**

1 **Q: Please state your name and business address.**

2 A: My name is Carl N. Seals, and my business address is 115 W. Washington St., Suite  
3 1500 South, Indianapolis, IN, 46204.

4 **Q: By whom are you employed and in what capacity?**

5 A: I am employed as Assistant Director of the Water/Wastewater Division for the  
6 Indiana Office of Utility Consumer Counselor ("OUCC"). A summary of my  
7 qualifications can be found in Appendix A.

8 **Q: What is the purpose of your testimony in this proceeding?**

9 A: Citizens Water ("Citizens" or "Petitioner") has proposed a Customer Lead Service  
10 Line Replacement Plan ("LSLR Plan" or "Plan") pursuant to Ind. Code 8-1-31.6,  
11 which will allow Citizens to recover the costs of customer lead service line  
12 improvements as eligible infrastructure improvements under Ind. Code 8-1-31. I  
13 recommend approval of Citizen's Lead Service Line Replacement Plan. However,  
14 I recommend Citizens not be authorized to require indemnification from  
15 participants for the acts and omissions of Citizens or its contractors.

16 **Q: What did you do to prepare for your testimony?**

17 A: I reviewed Petitioner's case-in-chief filed on August 20, 2021, including the Direct  
18 Testimonies and Attachments of Dan Moran, Director of Water Quality, System  
19 Control & Planning, Andy Lutz, Director of Program & Technical Services and  
20 Debi Bardhan-Akala, Director, Regulatory Affairs. I prepared data request  
21 questions and reviewed the Citizens' responses. I reviewed the Commission's

1 Order and testimony filed in Cause No. 45043 regarding Indiana American's  
2 request for approval of a Lead Service Line Replacement Plan. Finally, I reviewed  
3 information presented by the Environmental Protection Agency regarding lead  
4 service lines and the 1991 Lead and Copper Rule.

## II. LEAD EXPOSURE CONCERNS

5 **Q: What concerns does exposure to lead raise?**

6 A: According to the Environmental Protection Agency ("EPA") and Centers for  
7 Disease Control ("CDC"), lead is harmful to health, especially for children.  
8 Exposure to lead may cause health problems ranging from stomach distress to brain  
9 damage.<sup>1</sup> Both EPA and CDC agree that there is no known safe level of lead in a  
10 child's blood and that reducing exposure to lead can improve health outcomes.

11 **Q: How does lead get into drinking water?**

12 A: According to the EPA website "Basic Information about Lead in Drinking Water:"<sup>2</sup>

13 Lead can enter drinking water when plumbing materials that contain  
14 lead corrode, especially where the water has high acidity or low  
15 mineral content that corrodes pipes and fixtures. The most common  
16 sources of lead in drinking water are lead pipes, faucets, and  
17 fixtures. In homes with lead pipes that connect the home to the water  
18 main, also known as lead services lines, these pipes are typically the  
19 most significant source of lead in the water. Lead pipes are more  
20 likely to be found in older cities and homes built before 1986.  
21 Among homes without lead service lines, the most common problem  
22 is with brass or chrome-plated brass faucets and plumbing with lead  
23 solder.

24 **Q: What rules have been established by the EPA regarding lead levels in water?**

25 A: Under authority of the Safe Drinking Water Act. ("SDWA"), the EPA issued the  
26 Lead and Copper Rule<sup>3</sup> (also "LCR") in 1991, which established 15 parts per billion

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<sup>1</sup> <https://www.epa.gov/dwreginfo/lead-and-copper-rule>

<sup>2</sup> <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

<sup>3</sup> <https://www.epa.gov/dwreginfo/lead-and-copper-rule>

1 (“ppb”) of lead (0.015 mg/L) as the threshold requiring remedial actions by the  
2 utility. Remedial action includes the following:

- 3 • Corrosion control treatment
- 4 • Public outreach and education
- 5 • Lead service line replacement

6 Water utilities compare the sample results from homes to EPA’s action level of 15  
7 ppb, and if 10 percent or more of these samples have lead concentrations greater  
8 than the action level, the system must perform these remedial actions.<sup>4</sup>

9 **Q: Is Citizens in compliance with the Lead and Copper Rule?**

10 A: Yes. OUCC Attachment CNS-1 includes Citizens’ 2020 Drinking Water Report,  
11 which shows that Citizens achieved compliance in each of its Indianapolis, Morgan  
12 County, South Madison, and Westfield systems.

### **III. REVIEW OF PROPOSED LSLR PLAN**

13 **Q: What criteria must a utility address in its plan for replacement of customer-**  
14 **owned lead service lines to obtain approval from the Commission?**

15 A: Ind. Code 8-1-31.6-6 (a), provides the utility’s plan must address the following:

- 16 1. The availability of grants or low interest loans and how the water  
17 utility plans to use available grants or low interest loans to help  
18 the water utility finance or reduce the cost of the customer lead  
19 service line improvements for the water utility and the water  
20 utility’s customers, including any arrangements for the customer  
21 to receive available grants or financing directly.
- 22 2. A description of how the replacement of customer owned lead  
23 service lines will be accomplished in conjunction with  
24 distribution system infrastructure replacement projects.
- 25 3. The estimated savings in costs per service line that would be  
26 realized by the water utility replacing the customer owned  
27 portion of the lead service lines versus the anticipated

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<sup>4</sup> [https://www.epa.gov/sites/default/files/2019-10/documents/lcr101\\_factsheet\\_10.9.19.final\\_.2.pdf](https://www.epa.gov/sites/default/files/2019-10/documents/lcr101_factsheet_10.9.19.final_.2.pdf)

1 replacement costs if customers were required to replace the  
2 customer owned portion of the lead service lines.

3 4. The number of lead mains and lead service lines estimated to be  
4 part of the water utility's system.

5 5. A range for the number of customer owned lead service lines  
6 estimated to be replaced annually.

7 6. A range for the total feet of lead mains estimated to be replaced  
8 annually.

9 7. The water utility's proposal for addressing the costs of unusual  
10 site restoration work necessitated by structures or improvements  
11 located above the customer owned portion of the lead service  
12 lines.

13 8. The water utility's proposal for:

14 (A) communicating with the customer the availability of the  
15 water utility's plan to replace the customer owned portion of  
16 the lead service line in conjunction with the water utility's  
17 replacement of the utility owned portion of the lead service  
18 line; and

19 (B) documenting the customer's consent or lack of consent to  
20 replace the customer owned portion of the lead service line.

21 9. The water utility's proposal concerning whether the water utility  
22 or the customer will be responsible for future replacement or  
23 repair of the portion of the new service line corresponding to the  
24 previous customer owned lead service line.

25 10. The estimated total cost to replace all customer owned portions  
26 of the lead service lines within or connected to the water utility's  
27 system and an estimated range for the annual cost to be incurred  
28 by the water utility under the water utility's plan.

29 The Commission must approve a water utility's plan if it finds the plan to be  
30 reasonable and in the public interest. (Ind. Code 8-1-31.6-6 (b)).

31 **Q: Does Citizens' LSLR Plan address these 10 criteria?**

32 A: Yes. Support for those criteria is included in the testimonies of Citizens' Dan  
33 Moran and Andy Lutz.

1   **Q:    Do you have any concerns with the Plan?**

2    A:    Yes. Paragraph 4 of the “Right of Entry Agreement for Water Service Line Work”  
3           (CWA Attachment AL-1) to have Citizens replace a customer’s LSL contains very  
4           broad indemnification language. It states as follows:

5                   In consideration for performing the Work to inspect and, if  
6                   warranted, install the Customer’s service line at Citizens’ cost and  
7                   Citizens’ agreement to provide a twelve (12) month limited  
8                   workmanship warranty, Customer agrees to indemnify, release and  
9                   hold harmless Citizens and its affiliates and agents from all claims,  
10                  liabilities and costs resulting from Citizens’ and/or its approved  
11                  subcontractors’ acts and omissions in performing the Work.

12               (emphasis added.)

13           This language shifts all risk to the customer for any acts or omissions of Citizens  
14           or its contractors. Any potential liability for damage should already have been built  
15           into the estimate Citizens provided for the replacement of the lead service lines,  
16           and customers should not be held responsible for damage caused by Citizens or the  
17           contractors Citizens has selected to replace the lead service lines. Moreover,  
18           Citizens is in the best position to negotiate indemnification from its contractors, and  
19           this risk should not be shifted to the customer. Based on the OUCC’s experience it  
20           is the normal course of business to have the utility require indemnification  
21           provisions in the agreements with its contractors.

22   **Q:    Is this like the language approved by the Commission in Cause No. 45043?**

23    A:    Yes. The Commission approved similar or identical language when approving  
24           Indiana American’s LSLR Plan. In its August 7, 2019 Order on Remand in Cause  
25           No. 45043, the Commission found the “Indemnification Clause to be reasonable  
26           under the circumstances.” Its discussion and finding consisted of the following:

1 The OUCC argued that the Indemnification Clause is very broad and  
2 has the effect of shifting all risk from Indiana American to its  
3 customers. The OUCC's evidence states that the OUCC believes the  
4 LSLR Plan should be approved, but without the Indemnification  
5 Clause. The inability cited by Mr. Hoffman to perform the calculus of  
6 risk in the absence of the protection afforded by indemnification  
7 language seems to us likely to curtail the replacement of customer  
8 owned lead service lines if the Indemnification Clause is not approved.  
9 Accordingly, we find the Indemnification Clause to be reasonable  
10 under the circumstances. We also acknowledge that the documents  
11 attached to the LSLR Plan were described in the evidence as samples  
12 and that experience gained throughout the duration of a multiyear, and  
13 perhaps multi-decade program, may result in recommendations to  
14 change the specific language included. We further find that  
15 administrative efficiency is best served where our finding of the  
16 reasonableness of the particular language of the License Agreement  
17 including the Indemnification Clause, is construed to apply to  
18 substantially similar language that may be included in similar customer  
19 agreements used in connection with the LSLR Plan. Individual  
20 customers may avail themselves of our informal complaint procedure  
21 if particular facts and circumstances would render indemnification  
22 language unreasonable in terms or application and we retain the  
23 authority to open investigations into allegations that the LSLR Plan is  
24 not meeting its intended goals.

25 (Cause No. 45043, Order on Remand, p. 2)

26 The OUCC believes the indemnification language Citizens has chosen to use, while  
27 like Indiana-American's, is inappropriately broad. Customers are asked to be  
28 legally bound to accept and pay any cost of negligence by Citizens and contractors  
29 it hires. The particular circumstances the Commission relied on to approve the  
30 indemnification language in Cause No. 45043 was the utility's inability to perform  
31 the "calculus of risk" in the absence of the protection afforded by indemnification  
32 language so that it seemed to the Commission "likely to curtail the replacement of  
33 customer owned lead service lines" if the Indemnification Clause was not approved.  
34 Citizens Water and Indiana American are different utilities, and Citizens needs to show  
35 *its* circumstances require this broad indemnification language. (According to a



1 discovery response, it does not appear Citizens Water imposes this requirement on  
2 customers in any other agreement.) Citizens has not adequately explained why in this  
3 case it should be indemnified by its customers for its own negligence and the  
4 negligence of the contractors it hires. The goal of eliminating lead lines should be  
5 encouraged, and there is the possibility that such broad language may discourage  
6 homeowners from participating. I recommend the Commission direct Petitioner to  
7 remove the indemnification requirement from its Right of Entry Agreement for  
8 Water Service Line Work. If not, I recommend the Commission make clear, as it  
9 did in its Order on Remand in Cause No. 45034, that it retains jurisdiction to alter  
10 such provision.

#### **IV. CONCLUSION**

11 **Q: Please summarize your recommendations:**

12 A: I recommend the Commission approve Citizens' Lead Service Line Replacement  
13 Plan. I recommend the approval be made with instructions to remove from its Right  
14 of Entry Agreement for Water Service Line Work the language requiring the  
15 customer to indemnify or hold harmless Citizens and its contractors from all claims,  
16 liabilities and costs resulting from Citizens' or its approved subcontractors' acts  
17 and omissions in performing the replacement of the service line.

18 **Q: Does this conclude your testimony?**

19 A: Yes.

**I. APPENDIX A**

1   **Q:   Please describe your educational background and experience.**

2   A:   In 1981 I graduated from Purdue University, where I received a Bachelor of Science  
3       degree in Industrial Management with a minor in Engineering. I was recruited by  
4       the Union Pacific Railroad, where I served as mechanical and maintenance  
5       supervisor and industrial engineer in both local and corporate settings in St. Louis,  
6       Chicago, Little Rock and Beaumont, Texas. I then served as industrial engineer for  
7       a molded-rubber parts manufacturer before joining the Indiana Utility Regulatory  
8       Commission ("IURC") as engineer, supervisor and analyst for more than ten years.  
9       It was during my tenure at the IURC that I received my Master of Health  
10      Administration degree from Indiana University. After the IURC, I worked at  
11      Indiana-American Water Company, initially in their rates department, then  
12      managing their Shelbyville operations for eight years, and later served as Director  
13      of Regulatory Compliance and Contract Management for Veolia Water  
14      Indianapolis. I joined Citizens Energy Group as Rate & Regulatory Analyst  
15      following the October 2011 transfer of the Indianapolis water utility and joined the  
16      Office of Utility Consumer Counselor in April of 2016. In March 2020 I was  
17      promoted to my current position of Assistant Director of the Water and Wastewater  
18      Division.

19   **Q:   Have you previously provided testimony to the Indiana Utility Regulatory**  
20   **Commission?**

21   A:   Yes. I have testified in telecommunications, water and wastewater utility cases  
22       before the Commission.

# 2020 Drinking Water Report

Indianapolis, Morgan Co., Westfield & South Madison





## What is a drinking water report?

As a regional water supplier serving about 800,000 consumers in multiple counties in Central Indiana, Citizens Energy Group prides itself on providing safe, reliable, and high-quality water. As required by the U.S. Environmental Protection Agency (EPA), this annual drinking water report provides information on where water comes from and how it compares to current public water supply standards. This report contains a summary of water quality data collected over the past calendar year. If after reading this report you have any questions or concerns, please contact us at 317-924-3311.



## Where does my water come from?

Citizens Energy Group obtains water for its customers from several sources:

### Indianapolis & Morgan County

- White River supplies two of the four surface water treatment plants, White River and White River North. Morse Reservoir, near Noblesville, stores water to ensure a dependable supply in the White River to these plants.
- Fall Creek is another surface water supply. Geist Reservoir stores water to ensure an adequate supply in Fall Creek for the Fall Creek and White River treatment plants.
- A number of wells are used intermittently to supplement the supplies to the White River, White River North, and Fall Creek plants.
- Citizens also receives some surface water from Eagle Creek Reservoir, which supplies water to the T.W. Moses treatment plant.
- Citizens presently operates six groundwater stations that serve smaller portions of its service territory: White River North, Geist Station, Harding Station, South Well Field, Harbour, and Ford Road. These groundwater stations treat water pumped from underground water sources called aquifers.

### Citizens Westfield

Citizens Westfield's drinking water source is groundwater. Citizens Westfield operates three groundwater stations that serve small portions of the service territory: River Road, Cherry Tree, and Greyhound Pass. These groundwater stations treat water pumped from underground water sources called aquifers.

### Citizens South Madison

Citizens South Madison's drinking water source is groundwater. Citizens operates the South Madison groundwater treatment plant near Lapel, IN. Three onsite groundwater wells supply groundwater to this treatment plant.

## What's in my drinking water before it's treated?

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, reservoirs and groundwater wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals or human activity.

Contaminants that may be present in source water include the following:

- Microbial contaminants such as viruses, bacteria and protozoa, which may come from wastewater 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, 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 are naturally occurring and can be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that 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 pose a health risk.

## What's the difference between surface water and ground water?

Surface water comes from rivers, creeks, streams and reservoirs and may have more pollutants and contaminants than groundwater. Groundwater comes from wells drilled deep into the ground. Groundwater usually has higher mineral content than surface water.



## How is the water treated?

Groundwater treatment plants aerate and filter water to remove dissolved iron and manganese. Surface water treatment plants physically remove solids or other contaminants through coagulation, flocculation, sedimentation and filtration. Chlorine is added to kill any bacteria present and to maintain a level of disinfectant as the water travels through the distribution system. Fluoride is added to help strengthen resistance to cavities in teeth. A small amount of ammonia is used to minimize byproducts of the disinfection process and to allow chlorine to persist longer in the distribution system. For a few weeks each year, when the water temperature is cool, no ammonia is added in order to help maintain good water quality in the distribution system. This chlorine residual without ammonia known as “free chlorine” is a more active form of chlorine. The free chlorine has a more noticeable bleach or chlorine smell with the same level of chlorine.

## What’s being done to improve water quality?

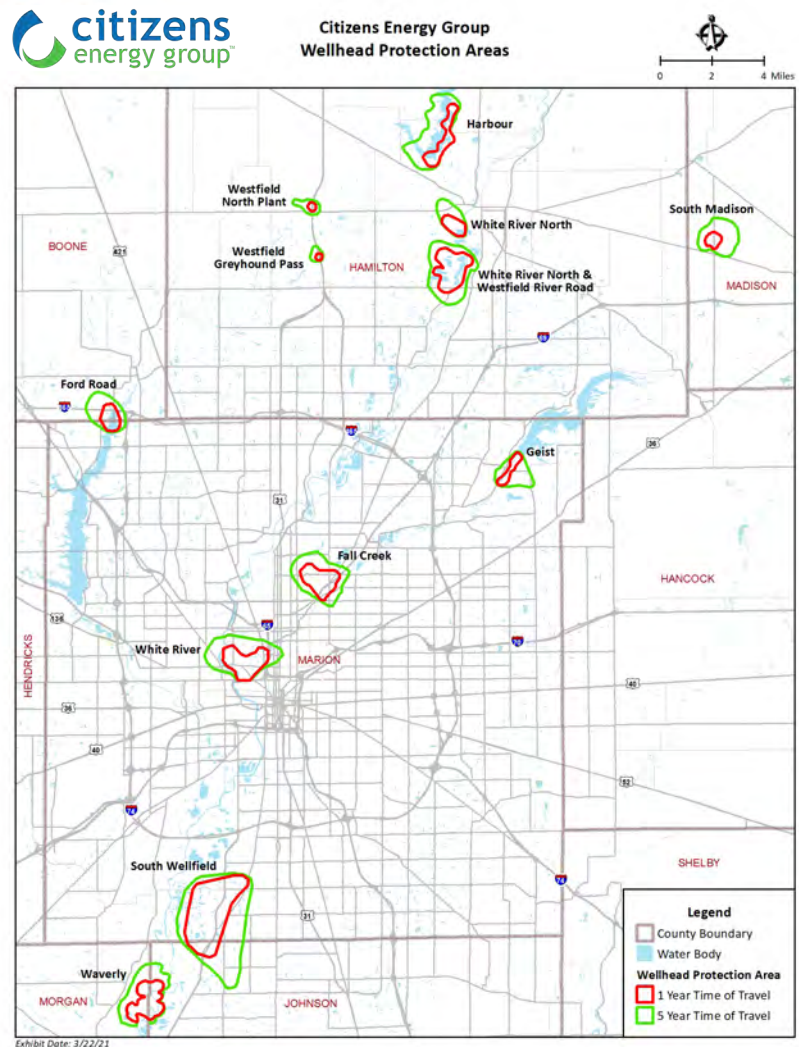
One of the easiest ways you can protect water quality is to limit the use of lawn fertilizers. When you do use fertilizer, make sure it’s phosphorus-free. Excess phosphorus provides nutrients to algae that can harm water quality.

### Wellhead Protection

In order to minimize the risk of groundwater contamination, Citizens has implemented a Wellhead Protection Program in accordance with the State Wellhead Protection Rule and local ordinances. The program works with local planning teams and regulators, maps wellhead protection areas, identifies potential sources of groundwater contamination, works with businesses to prevent spills and releases of chemicals, and prepares a contingency plan in case of contamination. For more information on wellhead protection, visit [CitizensEnergyGroup.com](http://CitizensEnergyGroup.com).

### Source Water Assessments

An inventory of identified potential sources of contamination upstream of each surface water treatment facility has been conducted by the United States Geological Survey for the Indiana Department of Environmental Management (IDEM). These assessments are a helpful component in Citizens’ overall source water protection strategy.



## What if I have special health considerations?

Raw water may contain cryptosporidium and other microbial contaminants. Water treatment technologies effectively inactivate the microbial contaminants; however, some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised individuals, such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly individuals and infants, can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. U.S. EPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the U.S. EPA Safe Drinking Water Hotline at (800) 426-4791 or EPA.gov.



## How does Citizens minimize lead in drinking water and how can I avoid it?

Citizens regularly tests drinking water from customer taps for lead and copper and takes steps in its treatment process to ensure corrosive conditions are not created in the distribution system that would contribute to elevated levels of lead and copper. While



rare, elevated lead levels are sometimes found in isolated samples of tap water taken from customer homes that have lead service lines or plumbing. Since each home has different plumbing pipes and materials, test results may differ for each home, but it is important to note that most homes with lead service lines or plumbing do not have elevated levels of lead in the tap water.

Once every three years, drinking water regulations require Citizens to samples tap water from 50 homes in the Indianapolis system and 30 homes in the Westfield system. These samples are taken from homes whose age indicate that they either have lead service lines or have copper pipes with lead solder. To be proactive, Citizens conducts this sampling on an annual basis. Results from these sampling events continue to be below the EPA's action level for lead and copper."

You cannot see, taste or smell lead in drinking water, and boiling water will not remove lead. Although the water quality provided by Citizens' minimizes the risk of lead, you can reduce your household's exposure to lead from service lines in drinking water by following these recommendations:

1. Flush your tap before drinking or cooking with the water if the water in the faucet has gone unused for more than six hours. The longer the water lies dormant in your home's plumbing, the more lead it might contain. Flush your tap with cold water for 30 seconds to two minutes before using. To conserve water, catch the running water and use it to water your plants.
2. Try not to cook with or drink water from the hot water faucet. Hot water has the potential to contain more lead than cold water. When you need hot water, heat cold water on the stove or in the microwave.
3. Remove loose lead solder and debris from plumbing. In homes in which the plumbing was recently replaced,

remove the strainers from each faucet and run the water for three to five minutes. When replacing or working on pipes, be sure to use materials that are lead-free. Use of lead-based solders has been illegal since 1986.

4. Check water softener systems. Certain home treatment devices such as water softeners might increase lead levels in your water. Always consult the device manufacturer for information on potential impacts to your drinking water or household plumbing.
5. Homeowners with lead plumbing fixtures should consider using a certified lead filter on faucets used for drinking and cooking.
6. Have an electrician check your wiring. If grounding wires from the electrical system in your home are connected to your plumbing, it can accelerate corrosion. A licensed electrician can determine whether your system is grounded properly. Do not attempt to change the wiring yourself, as improper grounding can cause electrical shock and fire hazards.

Additional information is available at:

[www.CitizensEnergyGroup.com/lead](http://www.CitizensEnergyGroup.com/lead) and from the U.S. EPA Safe Drinking Water Hotline at 800-426-4791 or EPA.gov

## What is Cryptosporidium?

Cryptosporidium is a microbial contaminant that lives in the intestines of animals and people. When ingested, this microbial contaminant may cause a disease called cryptosporidiosis, which causes flu-like symptoms. Although there has been no cryptosporidium found in treated finished drinking water, cryptosporidium is found in source water such as the White River, Fall Creek and Eagle Creek Reservoir.

Citizens utilizes a stringent monitoring program, testing source water and finished drinking water, as well as using online monitors that measure the clarity of the water, which helps determine the likeliness of the microbe's presence in the drinking water. In addition, Citizens' surface water treatment process uses ultraviolet disinfection to further improve water quality protection.



## 2020 Treated Drinking Water Data Indianapolis (IN5249004), Morgan County (IN5255019)

The chart below gives you a quick look at some of the substances the EPA requires Citizens to test for. The contaminant is listed to the left, followed by the maximum amount allowed by regulations, then the amount we found in our water. The tests are done on treated or "finished" water (excluding those listed under "Untreated Source Water"). See page 12 for definitions of terms used in this chart.

Contaminant	MCLG (Goal)	MCL (Limit)	Average of All Samples	Maximum of All Samples	2020 System Wide Range	Compliance Achieved	Possible Source
<b>Inorganics:</b>							
Barium (ppm)	2 ppm	2 ppm	0.12 ppm	0.27 ppm	0.032 - 0.27 ppm	YES	Erosion of natural deposits
Chromium (ppb)	100 ppb	100 ppb	ND	ND	ND	YES	Erosion of natural deposits
Fluoride (ppm)	4 ppm	4 ppm	0.66 ppm	1.3 ppm	0.10 - 1.3 ppm	YES	Natural deposits & treatment additive
Nitrate (ppm)	10 ppm	10 ppm	0.77 ppm	4.6 ppm	ND - 4.6 ppm	YES	Fertilizer, septic tank leachate
Selenium (ppb)	50 ppb	50 ppb	0.67 ppb	2.4 ppb	ND - 2.4 ppb	YES	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
<b>Other Regulated Organics:</b>							
2,4-D (ppb)	70 ppb	70 ppb	ND	ND	ND	YES	Herbicide runoff
Atrazine (ppb)	3 ppb	3 ppb	0.34 ppb	2.3 ppb	ND - 2.3 ppb	YES	Herbicide runoff
Simazine (ppb)	4 ppb	4 ppb	0.021 ppb	0.70 ppb	ND - 0.70 ppb	YES	Herbicide runoff
Xylenes, Total (ppb)	10,000 ppb	10,000 ppb	0.028 ppb	0.64 ppb	ND - 0.64 ppb	YES	Discharge from petroleum factories; discharge from chemical factories
<b>Turbidity:</b>		TT					
Turbidity (NTU)	N/A	1 NTU	0.08 NTU	0.24 NTU	0.01 - 0.24 NTU	YES	Soil runoff
Turbidity (% below TT)	N/A	100% < 0.3 NTU	N/A	N/A	100%	YES	Soil runoff
<b>Secondary Drinking Water Standards:</b>	MCLG (Goal)	SMCL	* Secondary standards are non-mandatory guidelines established by the EPA to assist utilities in managing drinking water for aesthetic considerations, such as taste, odor, and color. These contaminants are not considered to present a risk to human health at the SMCL.				
Aluminum (ppb)	N/A	200 ppb	44 ppb	180 ppb	ND - 180 ppb	N/A	Natural deposits; water treatment additive
Chloride (ppm)	N/A	250 ppm	67 ppm	170 ppm	20 - 170 ppm	N/A	Natural deposits; water treatment additive
Hardness (ppm)	N/A	N/A	300 ppm	420 ppm	140 - 420 ppm	N/A	Erosion of natural deposits; leaching
Iron (ppm)	N/A	0.3 ppm	BDL	0.086 ppm	ND - 0.086 ppm	N/A	Erosion of natural deposits; leaching
Manganese (ppm)	N/A	0.05 ppm	BDL	0.11	ND - 0.11 ppm	N/A	Erosion of natural deposits; leaching
Metolachlor (ppb)	N/A	N/A	0.027 ppb	0.18 ppb	ND - 0.18 ppb	N/A	Herbicide runoff
Nickel (ppb)	N/A	N/A	BDL	2.5 ppb	ND - 2.5 ppb	N/A	Erosion of natural deposits; leaching
pH (Standard Units)	N/A	6.5 - 8.5	7.8	8.4	7.2 - 8.4	N/A	
Sodium (ppm)	N/A	N/A	42 ppm	140 ppm	6.8 - 140 ppm	N/A	Erosion of natural deposits; leaching
Sulfate (ppm)	N/A	250 ppm	44 ppm	170 ppm	11 - 170 ppm	N/A	Erosion of natural deposits; leaching
Zinc (ppb)	N/A	5000 ppb	BDL	8.0 ppb	ND - 8.0 ppb	N/A	Natural deposits

## Indianapolis, Morgan County - continued

Contaminant	MCLG (Goal)	MCL (Limit)	Average of All Samples	Maximum of All Samples	2020 System Wide Range	Compliance Achieved	Possible Source
<b>Untreated Source Water:</b>							
Cryptosporidium (org/10L)	N/A	N/A	0.62	5	ND - 5 oocysts / 10L	N/A	
Giardia (org/10L)	N/A	N/A	2.3	36	ND - 36 cysts / 10 L	N/A	
TOC (Untreated Water, ppm)	N/A	N/A	3.7 ppm	6.8 ppm	2.4 - 6.8 ppm	N/A	Naturally present in the environment
<b>Indianapolis</b>							
<b>Disinfectant Residual:</b>	<b>MRDLG</b>	<b>MRDL</b>					
Chloramines (measured as Total Chlorine)	4 ppm	4 ppm	1.9 ppm	2.9 ppm	0.030 - 2.9 ppm	YES	Water additive used to control microbes
<b>Copper and Lead (Indianapolis)</b>	<b>MCLG</b>	<b>AL</b>					
Copper (ppm) [2019 Data]	1.3 ppm	1.3 ppm	0.099 ppm	0.57 ppm	0.22 ppm is the 90th Percentile (0 of 65 > AL)	YES	Corrosion of customer plumbing
Lead (ppb) [2019 Data]	0 ppb	15 ppb	3.1 ppb	36 ppb	7.7 ppb is the 90th Percentile (1 of 65 > AL)	YES	Corrosion of customer plumbing
<b>Organic Disinfection By-products (Indianapolis)</b>							
Total Trihalomethanes (TTHMs)	N/A	80 ppb (LRAA)	45 ppb	60 ppb (LRAA)	20 - 67 ppb	YES	By-product of chlorination treatment
Haloacetic acids (HAA5)	N/A	60 ppb (LRAA)	33 ppb	37 ppb (LRAA)	18 - 50 ppb	YES	By-product of chlorination treatment
<b>Microorganisms (Indianapolis)</b>							
E coli	0	1	ND	ND	ND	YES	Human and animal fecal waste
Total Coliforms	N/A	5.0%	0.06%	0.27%	0 - 0.27%	YES	Naturally present in the environment
Cryptosporidium (org/10L)	0 org/10L	TT	N/A	N/A	No Organisms Found	YES	Removed during treatment
Giardia (org/10L)	0 org/10L	TT	N/A	N/A	No Organisms Found	YES	Removed during treatment
<b>Radionuclides (Indianapolis):</b>							
Combined Radium (-226 & -228) [2019 Data]	0	5 pCi/L	N/A	1.73 pCi/L	0.5 - 1.73 pCi/L	YES	Erosion of natural deposits
Combined Uranium [2016 Data]	0	30 ppb	N/A	0.93 ppb	0.13 - 0.93 ppb	YES	Erosion of natural deposits
Gross Alpha, Excl. Radon & Uranium [2019 Data]	0	15 pCi/L	N/A	6.7 pCi/L	-0.28 - 6.7 pCi/L	YES	Erosion of natural deposits
<b>Additional Detected 2020 Monitoring Required by EPA (UCMRR 4)</b> <span style="float: right;">*EPA uses the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act (SDWA).</span>							
Bromide	N/A	N/A	35 ppb	56 ppb	25 - 56 ppb	N/A	Naturally present in the environment
Haloacetic acids (HAA5)	N/A	60 ppb	36 ppb	52 ppb	18 - 52 ppb	N/A	By-product of chlorination treatment
Haloacetic acids (HAA6)	N/A	N/A	8.0 ppb	11 ppb	5.2 - 11 ppb	N/A	By-product of chlorination treatment
Haloacetic acids (HAA9)	N/A	N/A	42 ppb	59 ppb	22 - 59 ppb	N/A	By-product of chlorination treatment
Manganese (ppm)	N/A	50 ppb (SMCL)	0.76 ppb	1.2 ppb	0.41 - 1.2 ppb	N/A	Erosion of natural deposits; leaching





## Indianapolis, Morgan County - continued

Contaminant	MCLG (Goal)	MCL (Limit)	Average of All Samples	Maximum of All Samples	2020 System Wide Range	Compliance Achieved	Possible Source
TOC (Untreated Water, ppm)	N/A	N/A	3.2 ppm	4.4 ppm	2.3 - 4.4 ppm	N/A	Naturally present in the environment
<b>Morgan County</b>							
Disinfectant Residual:	MRDLG	MRDL					
Chloramines (measured as Total Chlorine)	4 ppm	4 ppm	1.5 ppm	1.8 ppm	0.76 - 1.8 ppm	YES	Water additive used to control microbes.
Copper and Lead (Morgan County)	MCLG	AL					
Copper (ppm) [2018 Data]	1.3 ppm	1.3 ppm	0.070 ppm	0.16 ppm	0.12 ppm is the 90th Percentile (0 of 24 > AL)	YES	Corrosion of customer plumbing
Lead (ppb) [2018 Data]	0 ppb	15 ppb	1.2 ppb	7.7 ppb	3.5 ppb is the 90th Percentile (0 of 24 > AL)	YES	Corrosion of customer plumbing
<b>Organic Disinfection By-products (Morgan County)</b>							
Total Trihalomethanes (TTHMs)	N/A	80 ppb	N/A	9.3 ppb	9.1 - 9.3 ppb	YES	By-product of chlorination treatment
Haloacetic acids (HAA5)	N/A	60 ppb	N/A	5.3 ppb	5.1 - 5.3 ppb	YES	By-product of chlorination treatment
<b>Microorganisms (Morgan County)</b>							
E coli	0	1	ND	ND	ND	YES	Human and animal fecal waste
Total Coliforms	N/A	5.0%	ND	ND	ND	YES	Naturally present in the environment

Note: \*\*The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. Compliance monitoring for lead and copper is required no less frequently than every three years. To be proactive, Citizens conducts lead and copper sampling more frequently than required by rule. Radiochemical contaminant monitoring is conducted every nine years.

Note about Lead in Tap Water: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that the lead levels in your home may be higher than other homes in your community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Also, flush your tap water for 30 seconds to two minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline at 800-426-4791 or [www.EPA.gov](http://www.EPA.gov)

Monitoring Requirement Not met in 2020 -- Citizens Water Morgan County

Citizens is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During February 2020, Citizens did not complete all monitoring or testing for total coliforms and therefore cannot be sure of the quality of your drinking water during that time. There is no immediate risk and you do not need to take any action. This notice is being provided because only five (5) of the required six (6) total coliform samples were collected in February 2020. All five (5) samples collected indicated acceptable water quality, but the required sixth sample was not collected. In all months since, all six (6) required monthly samples were collected and analyzed, and all results indicated acceptable water quality.

Monitoring Requirement Not met in 2020 -- Citizens Water Indianapolis

Citizens is required to monitor your drinking water for specific contaminants on a regular basis. The results of regular monitoring are an indicator of whether our drinking water meets EPA's health standards. For a portion of November 2020, monitoring for Individual Filter Effluent Turbidity at one of the filters at the White River North Treatment Plant was not performed due to malfunction of the equipment that records those results. Therefore, Citizens cannot be sure of the quality of water from that individual filter at that time. This problem was identified and resolved on November 30, 2020.

What should I do? You do not need to use an alternative (i.e., bottled) water supply. However, if you have specific health concerns, consult your doctor.

What does this mean? This was not an immediate risk. If it had been, you would have been notified immediately. Turbidity has no health effects and was not an issue with the final water quality during this time. Turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

What happened? What was done? The equipment used to measure turbidity from filter #45 failed to record data due to a faulty sensor. The equipment on the remaining five individual filters and on the combined effluent from all of the filters continued to operate correctly, and turbidity values were well below Safe Drinking Water Act regulatory thresholds. Drinking water from this treatment facility is provided to some customers located in the northern portions of Citizens' service territory. This facility does not serve any customers south of 38th Street.

## 2020 Treated Drinking Water Data - Westfield (IN5229009)

The chart below gives you a quick look at some of the substances the EPA requires Citizens to test for. The contaminant is listed to the left, followed by the maximum amount allowed by regulations, then the amount that we found in our water. The tests are done on treated or "finished" water. See page 12 for definitions of terms used in this chart.

Contaminant	MCLG (Goal)	MCL (Limit)	Average of All Samples	Maximum of All Samples	2020 System Wide Range	Compliance Achieved	Possible Source
<b>Inorganics:</b>							
Barium (ppm)	2 ppm	2 ppm	0.19 ppm	0.32 ppm	0.076 - 0.32 ppm	YES	Erosion of natural deposits
Fluoride (ppm)	4 ppm	4 ppm	0.61 ppm	0.82 ppm	0.40 - 0.82 ppm	YES	Natural deposits & treatment additive
Nitrate (ppm)	10 ppm	10 ppm	BDL	0.67 ppm	ND - 0.67 ppm	YES	Fertilizer, septic tank leachate
<b>Copper and Lead:</b>							
Copper (ppm) (2018 Data)	1.3 ppm	1.3 ppm	0.17 ppm	0.97 ppm	0.33 ppm is the 90th Percentile (0 of 47 AL)	YES	Corrosion of customer plumbing
Lead (ppb) (2018 Data)	0 ppb	15 ppb	3.9 ppb	122 ppb	4.2 ppb is the 90th Percentile (2 of 47 > AL)	YES	Corrosion of customer plumbing
<b>Disinfectant Residual:</b>							
Chloramines (measured as Total Chlorine)	4 ppm	4 ppm	2.1 ppm	3.1 ppm	1.0 - 3.1 ppm	YES	Water additive used to control microbes
<b>Organic Disinfection By-products</b>							
Total Trihalomethanes (TTHMs)	N/A	80 ppb (LRAA)	7.2 ppb	11 ppb (LRAA)	2.6 - 16 ppb	YES	By-product of chlorination treatment
Haloacetic acids (HAA5)	N/A	60 ppb (LRAA)	3.2 ppb	6.8 ppb (LRAA)	ND - 8.8 ppb	YES	By-product of chlorination treatment
<b>Microorganisms</b>							
E coli	0	1	ND	ND	ND	YES	Human and animal fecal waste
Total Coliforms	N/A	5.0%	ND	ND	ND	YES	Naturally present in the environment
<b>Secondary Drinking Water Standards &amp; Unregulated Contaminants:</b>							
	MCLG (Goal)	SMCL	* Secondary standards are non-mandatory guidelines established by the EPA to assist utilities in managing drinking water for aesthetic considerations, such as taste, odor, and color. These contaminants are not considered to present a risk to human health at the SMCL.				
Chloride (ppm)	N/A	250 ppm	39 ppm	66 ppm	18 - 66 ppm	N/A	Natural deposits; water treatment additive
Hardness (ppm)	N/A	N/A	350 ppm	430 ppm	270 - 430 ppm	N/A	Erosion of natural deposits; leaching
Iron (ppm)	N/A	0.3 ppm	0.048 ppm	1.1 ppm	ND - 1.1 ppm	N/A	Erosion of natural deposits; leaching
pH (Standard Units)	N/A	6.5 - 8.5	7.7	8.0	7.3 - 8.0	N/A	
Manganese (ppm)	N/A	0.05 ppm	0.0032 ppm	0.14 ppm	ND - 0.14 ppm	N/A	Erosion of natural deposits; leaching
Nickel (ppb)	N/A	N/A	BDL	2.1 ppb	ND - 2.1 ppb	N/A	Erosion of natural deposits; leaching
Sodium (ppm)	N/A	N/A	25 ppm	33 ppm	17 - 33 ppm	N/A	Erosion of natural deposits; leaching
Sulfate (ppm)	N/A	250 ppm	83 ppm	180 ppm	4.0 - 180 ppm	N/A	Erosion of natural deposits; leaching
Zinc (ppb)	N/A	5000 ppb	2.7 ppb	8.1 ppb	ND - 8.1 ppb	N/A	Natural deposits



## Westfield - continued

Radionuclides							
Combined Radium (-226 & -228) [2020 Data]	0	5 pCi/L	N/A	1.2 pCi/L	ND - 1.2 pCi/L	YES	Erosion of natural deposits
Combined Uranium [2016 Data]	0	30 ppb	N/A	1.1 ppb	0.54 - 1.1 ppb	YES	Erosion of natural deposits
Gross Alpha, Excl. Radon & Uranium [2020 Data]	0	15 pCi/L	N/A	3.2 pCi/L	ND - 3.2 pCi/L	YES	Erosion of natural deposits

Note: \*\*The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. Compliance monitoring for lead and copper is required no less frequently than every three years. Compliance monitoring for lead and copper is required no less frequently than every three years. Radiochemical contaminant monitoring is conducted every nine years.

Note about Lead in Tap Water: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that the lead levels in your home may be higher than other homes in your community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Also, flush your tap water for 30 seconds to two minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline at 800-426-4791 or [www.EPA.gov](http://www.EPA.gov)

## 2020 Treated Drinking Water Data - South Madison (IN5248026)

The chart below gives you a quick look at some of the substances that the EPA requires the utility to test for. You'll notice that the contaminant is listed to the left, followed by the maximum amount allowed by regulations and then the amount that we found in our water. The tests are done on treated or "finished" water. See page 12 for definitions of terms used in this chart.

Contaminant	MCLG (Goal)	MCL (Limit)	Average of All Samples	Maximum of All Samples	2020 System Wide Range	Compliance Achieved	Possible Source
<b>Inorganics:</b>							
Barium (ppm)	2 ppm	2 ppm	0.32 ppm	0.32 ppm	0.32 ppm (1 Sample)	YES	Erosion of natural deposits
Fluoride (ppm)	4 ppm	4 ppm	0.63 ppm	0.75 ppm	0.46 - 0.75 ppm	YES	Natural deposits & treatment additive
Nitrate (ppm)	10 ppm	10 ppm	0.44 ppm	0.61 ppm	ND - 0.61 ppm	YES	Fertilizer, septic tank leachate
Secondary Drinking Water Standards & Unregulated Contaminants:	MCLG (Goal)	SMCL	* Secondary standards are non-mandatory guidelines established by the EPA to assist utilities in managing drinking water for aesthetic considerations, such as taste, odor, and color. These contaminants are not considered to present a risk to human health at the SMCL.				
Chloride (ppm)	N/A	250 ppm	26 ppm	29 ppm	22 - 29 ppm	N/A	Natural deposits; water treatment additive
Hardness (ppm)	N/A	N/A	400 ppm	440 ppm	340 - 440 ppm	N/A	Erosion of natural deposits; leaching
Iron (ppm)	N/A	0.3 ppm	0.012 ppm	0.012 ppm	0.012 ppm (1 Sample)	N/A	Erosion of natural deposits; leaching
pH (Standard Units)	N/A	6.5 - 8.5	7.6	7.9	7.3 - 7.9	N/A	
Silver (ppb)	N/A	100 ppb	ND	ND	ND	N/A	Naturally present in the environment
Sodium (ppm)	N/A	N/A	9.6 ppm	13 ppm	8.3 - 13 ppm	N/A	Erosion of natural deposits; leaching
Sulfate (ppm)	N/A	250 ppm	46 ppm	52 ppm	19 - 52 ppm	N/A	Erosion of natural deposits; leaching
<b>Disinfectant Residual:</b>							
Chloramines (measured as Total Chlorine)	4 ppm	4 ppm	1.7 ppm	2.1 ppm	0.60- 2.1 ppm	YES	Water additive used to control microbes
Copper and Lead (Southern Madison)	MCLG	AL					



## South Madison - continued

Contaminant	MCLG (Goal)	MCL (Limit)	Average of All Samples	Maximum of All Samples	2020 System Wide Range	Compliance Achieved	Possible Source
Copper (ppm) [2018 Data]	1.3 ppm	1.3 ppm	0.27 ppm	1.5 ppm	0.17 ppm is the 90th Percentile (1 of 8 > AL)	YES	Corrosion of customer plumbing
Lead (ppb) [2018 Data]	0 ppb	15 ppb	2.5 ppb	9.7 ppb	8.5 ppb is the 90th Percentile (0 of 8 > AL)	YES	Corrosion of customer plumbing
<b>Organic Disinfection By-products (Southern Madison)</b>							
Total Trihalomethanes (TTHMs)	N/A	80 ppb	N/A	9.6 ppb	6.8 - 9.6 ppb	YES	By-product of chlorination treatment
Haloacetic acids (HAA5)	N/A	60 ppb	N/A	6.7 ppb	6.3 - 6.7 ppb	YES	By-product of chlorination treatment
<b>Microorganisms (Southern Madison)</b>							
E coli	0	1	ND	ND	ND	YES	Human and animal fecal waste
Total Coliforms	N/A	5.0%	ND	ND	ND	YES	Naturally present in the environment
<b>Radionuclides (South Madison):</b>							
Combined Radium (-226 & -228) [2019 Data]	0	5 pCi/L	N/A	1.3 pCi/L	1 Sample	YES	Erosion of natural deposits
Combined Uranium [2016 Data]	0	30 ppb	N/A	0.05 ppb	1 Sample	YES	Erosion of natural deposits
Gross Alpha, Excl. Radon & Uranium [2019 Data]	0	15 pCi/L	N/A	1.1 pCi/L	1 Sample	YES	Erosion of natural deposits

Note: \*\*The state requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though accurate, is more than one year old. Some contaminants are sampled less frequently than once a year; as a result, not all contaminants were sampled for during the CCR calendar year. If any of these contaminants were detected the last time they were sampled for, they are included in the table along with the date that the detection occurred. Compliance monitoring for lead and copper is required no less frequently than every three years. Compliance monitoring for lead and copper is required no less frequently than every three years. Radiochemical contaminant monitoring is conducted every nine years.

Note about Lead in Tap Water: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that the lead levels in your home may be higher than other homes in your community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested. Also, flush your tap water for 30 seconds to two minutes before using tap water. Additional information is available from the U.S. EPA Safe Drinking Water Hotline at 800-426-4791 or [www.EPA.gov](http://www.EPA.gov)





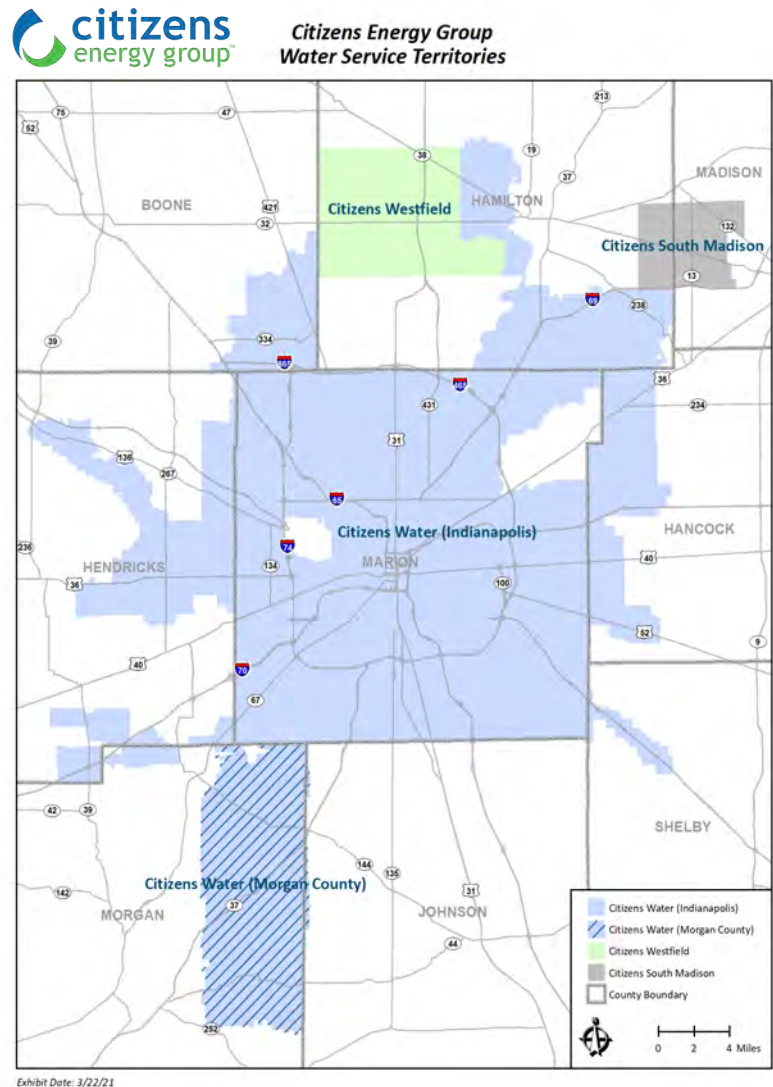
## How hard is my water?

As is common with water in this region, Citizens water is considered “hard” due to the naturally occurring levels of the minerals calcium and magnesium. The water hardness, expressed as calcium carbonate, typically ranges from around 200 to 350 milligrams per liter, or parts per million (ppm). This equates to 12 to 20 grains per gallon (the measure often referred to in determining water softener settings). Water hardness can vary depending on the hardness of the source water that is used to supply different treatment plants. More specific information about typical water hardness at your address can be obtained by calling 317-924-3311.

## What can I do to conserve water?

Consider these hints for water conservation:

- Water your lawn thoroughly only twice per week and use a rain sensor on your irrigation system so it turns off when it’s raining.
- Use a shut-off nozzle on your garden hose, and never use water to clean sidewalks and driveways.
- To conserve year-round, regularly check for leaks in toilets and faucets, and run dishwashers and washing machines only when they’re full.
- Don’t let water run while brushing your teeth or shaving.
- Consider buying low-flow plumbing fixtures and high efficiency appliances with WaterSense and Energy Star labels



## About Citizens

Citizens Energy Group provides safe and reliable water, wastewater, natural gas and thermal energy services to about 800,000 people and thousands of businesses in Central Indiana. Citizens operates its utilities for the benefit of customers and the community.



## What do all of these terms mean?

- AL (Action Level) - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow
- BDL - Below Detection Level
- LRAA (Locational Running Annual Average) - the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
- 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.
- MCLG (Maximum Contaminant Level Goal) - The level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLGs allow for a margin of safety.
- MRDL (Maximum Residual Disinfectant Level) - The highest level of the disinfectant allowed in drinking water. There is convincing evidence that the addition of disinfectant is necessary for control of microbial contaminants.
- N/A - Not Applicable
- ND - Non-Detect
- NTU (Nephelometric Turbidity Units) - Unit to measure turbidity
- org/10L - Organisms per 10 liters
- ppm - Parts per million
- ppb - Parts per billion
- pCi/L - Picocuries per liter, used to measure radioactivity
- SMCL (Secondary Maximum Contaminant Limits) - Non-mandatory guidelines established by the EPA to assist utilities in managing drinking water for aesthetic considerations, such as taste, odor and color. These contaminants are not considered to present a risk to human health at the SMCL.
- TOC - Total organic carbon
- TT (Treatment Technique) - A required process intended to reduce the level of a contaminant in drinking water
- Turbidity - The measure of the cloudiness of water. Citizens monitors turbidity as an indicator of the effectiveness of the filtration system.

## Citizens Energy Group

### Customer Service & Water Quality Information

Call Center: ..... (317) 924-3311

Hours: Mon - Fri: ..... 7:00 a.m. - 7:00 p.m.

Saturday: ..... 9:00 a.m. - 1:00 p.m.

*To report emergencies or check account balances 24/7, please call the number above.*

Website: ..... CitizensEnergyGroup.com

### Corporate Office:

Citizens Energy Group  
2020 North Meridian St.  
Indianapolis, IN 46202

### Bill Payment Address:

Citizens Energy Group  
PO Box 7056  
Indianapolis, IN 46207-7056

## Water Wizard

The Water Wizard is an online tool designed to assist you in diagnosing some of the most commonly perceived water quality concerns by answering a few basic questions.



[www.CitizensEnergyGroup.com/WaterWizard](http://www.CitizensEnergyGroup.com/WaterWizard)





More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791, or via the web at [www.EPA.gov](http://www.EPA.gov).

Para español, por favor visite [www.CitizensEnergyGroup.com](http://www.CitizensEnergyGroup.com).