

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?

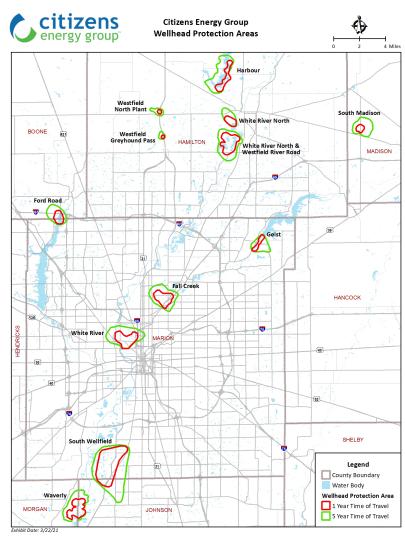
One of the easiest ways you can protect water quality is to limit the use of lawn fertilizers, When you do use fertilizer, make sure it's phosphorus-free. Excess phosphorus provides nutrients to algae that can harm water quality.

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.

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 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	
Inorganics:								
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	
Other Regulated Organics:								
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	
Turbidity:		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	
Secondary Drinking Water Standards:	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	
Untreated Source Water:								
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	
Indianapolis								
Disinfectant Residual:	MRDLG	MRDL						
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	
Copper and Lead (Indianapolis)	MCLG	AL						
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	
Organic Disinfection By-products (I	ndianapolis)							
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	
Microorganisms (Indianapolis)								
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	
Radionuclides (Indianapolis):					1			
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	
Additional Detected 2020 Monitoring Required by EPA (UCMRR 4)	*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).							
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		
Morgan County									
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		
Organic Disinfection By-products (M	Morgan County)								
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		
Microorganisms (Morgan County)									
E coli	0	1	ND	ND	ND	YES	Human and animal fecal waste		
Total Coliforms Note: **The state requires us to monitor	N/A for certain conta	5.0% minants less than	ND once per year bec	ND ause the conce	ND Intrations of these contain	YES ninants do not d	Naturally present in the environment hange 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

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
Inorganics:							
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
Copper and Lead:	MCLG	AL					
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
Disinfectant Residual:	MRDLG	MRDL					
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
Organic Disinfection By-products							
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
Microorganisms							
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
Secondary Drinking Water Standards & Unregulated Contaminants:	MCLG (Goal)	SMCL	in managing	drinking water	er for aesthetic conside	erations, such a	ed by the EPA to assist utilities as taste, odor, and color. These man 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. 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

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	
Inorganics:								
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	
Disinfectant Residual:	MRDLG	MRDL						
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		
Organic Disinfection By-products (Southern Madiso	on)							
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		
Microorganisms (Southern Madisor	1)								
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		
Radionuclides (South Madison):	Radionuclides (South Madison):								
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. 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



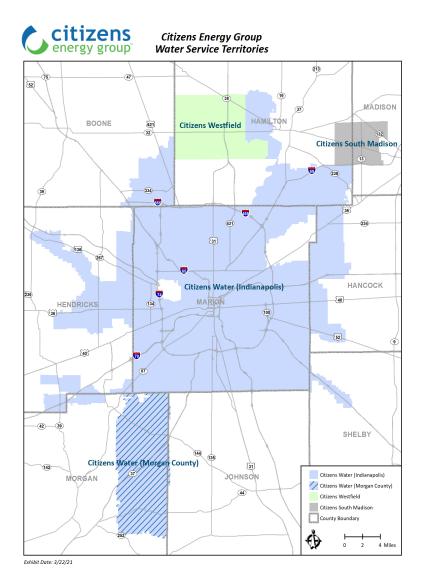
How hard is my water?

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

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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.







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.