

Annual Drinking Water Quality Report 2020
CITY OF SHINNSTON
40 Main Street
Shinnston, WV 26431
Shinnston PWS ID # 3301721
Shinnston-Saltwell Road PWS ID # 3301741
June 2, 2021

Why am I receiving this report?

In compliance with the Safe Drinking Water Act Amendments, the **City of Shinnston** is providing its customers with this annual water quality report. This report explains where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. The information in this report shows the results of our monitoring for the period of January 1st to December 31st, 2017 or earlier if not on a yearly schedule.

If you have any questions concerning this report, you may contact **Chad Edwards, City Manager, 304-592-6058**. If you have any further questions, comments or suggestions, please attend any of our regularly scheduled water board meetings held on the **2nd and last Monday** of every month at **7:00 PM** in the **Council Chambers, 43 Bridge Street, Shinnston, WV**.

Where does my water come from?

Your drinking water source is **surface** water from the Tygart Valley River. For those customers served by Shinnston-Saltwell Road Water System, the **purchased surface** water is from the West Fork River and treated by the Clarksburg Water Board.

Source Water Assessment

A Source Water Protection Plan was conducted in 2019. The intakes that supply drinking water to the **Shinnston Water System and Clarksburg Water Board** have a higher susceptibility to contamination, due to the sensitive nature of surface water supplies and the potential contaminant sources identified within the area. This does not mean that the intakes will become contaminated; only those conditions are such that the surface water could be impacted by a potential contaminant source. Future contamination may be avoided by implementing protective measures. The source water protection plan which contains more information is available for review at clarksburgwater.com and shinnstonwv.com or a copy will be provided to you at our office during business hours or from the West Virginia Bureau of Public Health 304-558-2981.

Why must water be treated?

All drinking water contains various amounts and kinds of contaminants. Federal and state regulations establish limits, controls, and treatment practices to minimize these contaminants and to reduce any subsequent health effects.

Contaminants in Water

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits of 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 these 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 (800-426-4791).

The source of drinking water (both tap and bottled water) includes rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water 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 storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

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 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 (800-426-4791).

Water Quality Data Table

Definitions of terms and abbreviations used in the table or report:

- **AL - Action Level**, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **LRAA - Locational Running Annual Average** is an average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
- **MCL - Maximum Contaminant Level**, or 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 technique.
- **MCLG - Maximum Contaminant Level Goal**, or 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.
- **MRDL - Maximum Residual Disinfectant Level**, or the highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary to control microbial contaminants.
- **MRDLG - Maximum Residual Disinfectant Level Goal**, or the level of drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect benefits of use of disinfectants to control microbial contaminants.
- **N/A** - not applicable
- **ND** - Not Detectable, no contaminants were detected in the sample(s) taken.
- **NE** - not established

- **NTU** - Nephelometric Turbidity Unit, used to measure cloudiness in water
- **ppb** - parts per billion or micrograms per liter (**µg/l**)
- **pCi/L** – picocuries per liter (a measure of radioactivity)
- **ppm** - parts per million or milligrams per liter (**mg/l**)

The **Shinnston Water System and Clarksburg Water Board** routinely monitor for contaminants in your drinking water according to federal and state laws. The tables below show the results of our monitoring for contaminants.

Table of Test Results - Regulated Contaminants – City of Shinnston

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Turbidity	N	0.09 100% of monthly samples <.3	NTU	0	TT	Soil runoff
Total organic carbon	N	0.5	ppm	NA	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	0.026	ppm	2	2	Discharge from drilling wastes. Erosion of natural deposits.
Fluoride	N	1.08	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from aluminum and fertilizer plants
Nitrate	N	0.66	ppm	10	10	Runoff from fertilizer use; erosion of natural deposits
*Cooper	N	0.039	Ppm	1.3	AL-1.3	Corrosion of household plumbing systems; erosion of natural deposits.
*Lead	N	0.62	Ppb	0	AL-15	Corrosion of household plumbing systems; erosion of natural deposits
DISINFECTANT						
Chlorine	N	RAA 1.6 Range 1.1-2.5	ppm	4 MRDLG	4 MRDL	Water additive used to control microbes

* Copper and lead samples were collected from 40 area residences on July 28, 2020. Only the 90th percentile is reported

Disinfection Byproducts	Violation Y/N	Highest LRAA	Range (low/high)	Unit of measure	MCLG	MCL	Likely source of Contamination
Haloacetic acids (HAA5) Site 1- 40 Main Street	N	23.275	8 / 29.70	ppb	NA	60	By-product of drinking water disinfection
*Total trihalomethanes (TTHMs) Site 1-40 Main Street	N	34.925	3.8 / 29.3	ppb	NA	80	By-product of drinking water chlorination
Haloacetic acids (HAA5) Site 2- 65 Fergusson St	N	22.625	7.2 / 20.7	ppb	NA	60	By-product of drinking water disinfection
*Total trihalomethanes (TTHMs) Site 2- 65 Fergusson	N	24	0.3 / 22	ppb	NA	80	By-product of drinking water chlorination

Table of Test Results - Unregulated Contaminants

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Nickel	N	1.2	ppb	100	100	Found in natural deposits as ore containing other elements.
Sodium	N	5.51	ppm	NE	20	Erosion of natural deposits

Date Issued	System Name	Number	Code / Type	Monitoring Period
08-14-2020	City of Shinnston	2020-1507	71/CCR Report	01/01/19-12/31/19
11-25-2019	City of Shinnston	2020-1506	52/LCR	01/01/17-10/01/19
10-08-2019	City of Shinnston	2020-1503	72/CCR Report	01/01/19-12/31/19

Some or all of our drinking water is supplied from another water system. The table below lists some of the drinking water contaminants which were detected in 2020. The entire list can be found at www.clarksburgwater.com/

Table of Test Results - Regulated Contaminants – Clarksburg Water Board

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants						
Turbidity	N	Annual Average 0.05 Range 0.01-0.15 100% of monthly samples < 0.3	NTU	0	TT	Soil runoff
Total organic carbon	N	Annual Average 2.8 Range 1.8 – 4.6 19.8% removal	ppm	0	TT	Naturally present in the environment
Inorganic Contaminants						
Barium	N	0.0345	ppm	0	2	Discharge from drilling wastes, discharge from metal refineries, erosion of natural deposits.
*Copper	N	0.158	ppm	1.3	AL=1 .3	Corrosion of household plumbing systems; erosion of natural deposits.

Fluoride	N	Annual Average 0.70 Range 0.51-0.84	ppm	4	4	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
*Lead	N	5.3	ppb	0	AL-15	Corrosion of household plumbing systems; erosion of natural deposits

*Copper and lead samples were collected from 30 area residences in June 25, 2019. Only the 90th percentile is reported. None of the samples collected exceeded the MCL.

Table of Test Results - Unregulated Contaminants

Contaminant	Violation Y/N	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination
*Sodium	N	9.31	ppm	0	20	Erosion of natural deposits

*Sodium is an unregulated contaminant. Anyone having a concern over sodium should contact their primary care provider.

Additional Information

All other water test results for the reporting year 2020 were all non-detects.

Turbidity is the measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

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. The **City of Shinnston and Clarksburg Water Board** is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting 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 drinking 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 at 1-800-426-4791 or at <http://www.epa.gov/safewater/lead>.

This report will not be mailed. A copy will be provided to you upon request at our office during regular business hours or you can get one at <https://tinyurl.com/shinnstonccr>.

PLEASE SHARE THIS REPORT WITH OTHER PEOPLE WHO DRINK THIS WATER, ESPECIALLY THOSE WHO DO NOT RECEIVE THIS INFORMATION DIRECTLY. (FOR EXAMPLE, RESIDENTS IN APARTMENT BUILDINGS, NURSING HOMES, SCHOOLS AND BUSINESSES).