Some or all of these definitions may be found in this report:

- Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - the level of a contaminant in drinking water below which there is no known or expected rish to health. MCLGs allow for a margin of safety.

- Maximum Residual Disinfectant Level (MRDL) - the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

- Maximum Residual Disinfectant Level Goal (MRDLG) - the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

- Below Detection Levels (BDL) - laboratory analysis indicates that the contaminant is not present.

- Not Applicable (N/A) - does not apply.

- Parts per million (ppm) - or milligrams per liter, (mg/l). One part per million corresponds to one minute in two years, or a single penny in $10,000.

- Parts per billion (ppb) - or micrograms per liter, ug/L). One part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

- Parts per trillion (ppt) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

- Picocuries per liter (pCi/L) - a measure of the radioactivity in water.

- Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

- Million Fibers per Liter (MFL) - a measure of the presence of asbestos fibers that are longer than 10 micormeters.

- Nephelometric Turbidity Unit (NTU) - a measure of the clarity of water. Turbidity has no health effects. However, turbidity can provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of the filtration system.

- Variances & Exemptions (V&E) - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

- Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system shall follow.

- Treatment Technique (TT) - a required process intended to reduce the level of a contaminant in drinking water.

GCWD
BOARD OF DIRECTORS

A five-member Board of Commissioners appointed by the County Judge Executive to serve four year terms, directs the business of the Water District. If you have questions or comments for the Commissioners, they would be glad to hear from you. You are also invited to attend the regular board meetings conducted on the fourth Monday of each month at 10:00 am (CST) at 21 Shull White Rd, Leitchfield, KY 42754.

NANCY CAIN - Chairman
3580 Millerstown Rd
Clarkson, KY 42726
(270) 242-7802

KENNETH SHARP - Vice Chair
2438 Wax Rd
Clarkson, KY 42726
(270) 242-9318

KEITH BROOKS - Commisioner
491 Oakmont Blvd
Leitchfield, KY 42754
(270) 868-0168

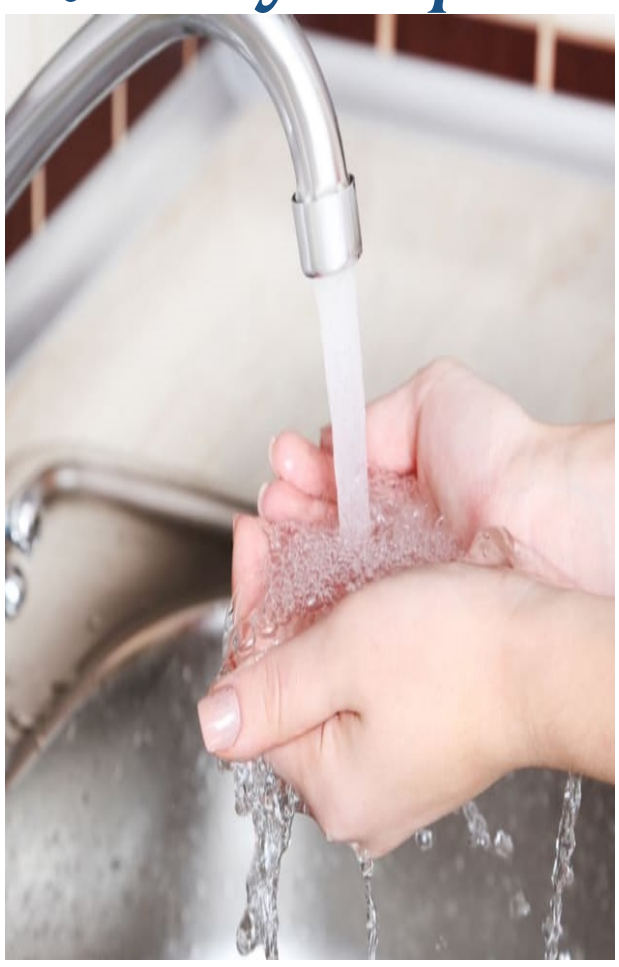
MIKE KIPPER - Secretary
347 Freedom School Rd
Leitchfield, KY 42754
(270) 287-0196

CRAIG CONSTANT - Treasurer
230 Tanmar Rd
Leitchfield, KY 42755
(270) 200-0090

Jeremy Woosley
Water District Manager
(270) 259-2917

Grayson County Water District

2022 Water Quality Report



21 Shull White Rd
Leitchfield, KY 42754
(270) 259-2917
www.graysonwater.com
gcwd@graysonwater.com
PWSID: KY0430616

Grayson County Water District Consumer Confidence Report for year 2021

2021 was a very busy year for the Grayson County Water District. The Water District is beginning preparation for starting a project that will connect the West side of Grayson County to the East side of Grayson County. The decision to start this project was made by our Board of directors a few years ago to allow the Water District the flexibility to supply it's own water to all of it's customers across the county. While the Water District will continue to purchase water from the City of Leitchfield to supply a portion of it's system, it will have the option and ability to supply the entire system from it's own water treatment plant should the need arise.

December 31st, 2021 marked the end of a very long and successful career, as Kevin Shaw announced his retirement. Kevin has been very successful as Manager for the Water District and due to his vast knowledge and excellent leadership, the Water District is one of the best run Drinking Water Systems in the State. The Water District now has around 600 miles of water line across the county and keeps around 7000 active customers. Kevin has worked hard to keep the Water District's annual water loss below 10% consistently throughout his leadership and has taught all employees to follow in his foot steps in keeping water loss low. The Grayson County Water District would like to wish Kevin a wonderful retirement with his family.

The Grayson County Water District needs your help! In December 2021 the EPA announced the new Lead and Copper Rule. This new rule requires all drinking water systems to identify all of its Lead service lines in the distribution system. This includes what is normally considered the customers portion of the water service from the water meter to the customers home. GCWD will work diligently with all it's customers over the next year or so to try to identify all service lines in the distribution system. You should have received a survey in February's monthly bill to fill out and return giving us a little info on your homes plumbing and when it was installed along with some updated contact info. If you haven't done so, please fill out this survey and return it to our office. You can also find the survey on the Grayson County Water District's web site at https://www.graysonwater.com/lead-copper-rule/ . Please feel free to call our office at 270-259-2917 with any concerns or questions about the new Lead and Copper Rule.

Message from the Manager:

It is with great pleasure that I have been chosen by our Board of Directors to take the reins of the Grayson County Water District. I began my career with the Water District in May of 2002 as a Drinking Water Treatment Plant Operator. Over the years I have migrated through the Water District and have held several positions and performed just about every duty there is in the Water District. I take great pride in providing a service to this county's communities and the people therein. I started my career in the Water Utility industry about 25 years ago and have grown my knowledge and skills over the years and look forward to continuing to the lead the Water District to a bigger and brighter future for it's customers and employees.

Sincerely,
Jeremy Woosley

The data in this table represents water purchased in 2021 from System A: Leitchfeld Municipal Utilities and water produced in 2021 by System B: Grayson County Water District

The data presented in this report are from the most recent testing done in accordance with administrative regulations in 401 KAR Chapter 8. As authorized and approved by EPA, the State has reduced monitoring requirements for certain contaminants to less often than once per year because the concentrations of these contaminants are not expected to vary signiÿcantly from year to year. Some of the data in this table, though representative, may be more than one year old.

	Allowable Levels	Highest Single Measurement	Lowest Monthly %	Violation Y/N	Likely Source
Turbidity (NTU) TT	Never more than 1 NTU Less than 0.3 NTU 95% of samples each month.	A: 0.27 NTU B: 0.30 NTU	100% 100%	NO NO	Soil runoff

Regulated Contaminants

These substances are regulated by the EPA. That means we test for them and they cannot be above a certain level, referred to as the MCL (maximum contaminant level). For additional information on these contaminants, please visit the Environmental Protection Agency's web page at www.epa.gov.

Contaminant (units)	MCL	MCLG	Report Level	Range	Date of Sample	Violation Y/N	Likely Source of Contamination
Disinfectants/Disinfection Byproducts and Precursors							
Total Organic Carbon (ppm) measured as ppm, but reported as a ratio.*	TT*	N/A	(lowest annual average) A=1.85 B=2.07	(monthly ratios) A=1.36 – 3.07 B=1.41 – 2.68	2021 2021	NO NO	Naturally present in environment.
*Monthly ratio is the % TOC removal achieved to the % TOC removal required. Annual average of the monthly ratios must be 1.00 or greater for compliance.							
Chlorine (ppm)	MRDL: 4	MRDLG: 4	(annual average) A=1.05 B=1.07	A=0.40- 1.80 B=0.27- 1.88	2021 2021	NO NO	Water additive used to control microbes.
HAA or Haloacetic acids (ppb) [individual sites]	MCL: 60	MCLG: N/A	(high site average) A=32 B=42	A=6 - 49 B=24.8- 66.2	2021 2021	NO NO	By-product of drinking water disinfection.
TTHM or Total Trihalomethanes (ppb) [individual sites]	MCL: 80	MCLG: N/A	(high site average) A=47 B=64	A=14.9 - 71.3 B=22.2 - 84.1	2021 2021	NO NO	By-product of drinking water disinfection.
Synthetic Organic Contaminants							
Atrazine (ppb)	3	3	A=0.45 BDL	A=0.30 - 0.68 B=BDL to 0.42	August 2021 June 2021	NO NO	Runoff from herbicide used on row crops
2,4-D (ppb)	70	70	BDL	B=BDL to 0.35	June 2021	NO	Runoff from herbicide used on row crops
Inorganic Contaminants							
Barium (ppm)	2	2	A=0.02 B=0.026	A=0.02 A=0.026	March 2021 June 2021	NO NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Nitrate (ppm)	10	10	A=0.18 B=0.38	A=0.18 B=0.38	May-2021 June-2021	NO NO	Runoff from herbicide use; leaching from septic tanks; sewage; erosion of natural deposits
Fluoride (ppm)	4	4	A=0.83 B=0.75	A=0.83 B=0 .75	March 2021 June-2021	NO NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Radioactive Contaminants							
Alpha Emitters [4000] (pCi/L	15	0	B=1.3	B=1.3 - 1.3	July-2017	NO	Erosion of natural deposits
Combined Radium (pCi/L	5	0	B=1.011	B= 1.011 - 1.011	July-2017	NO	Erosion of natural deposits

Lead & Copper

Contaminant (units)	Action Level	MCLG	90th percentile results	Range of Detection	Date of Sample	Violation Y/N	Likely Source of Contamination
Lead (ppb) 0 sites exceeded action level	AL = 15	0	A=2 B=0.0	A=0 - 5 B=0.0- 2.55	July 2019 Aug 2021	NO NO	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ppm) 0 sites exceeded action level	AL = 1.3	1.3	A=0.22 B=0.176	A=0 - 0.83 B=0.004 - 0.267	July 2019 Aug 2021	NO NO	Corrosion of household plumbing systems; erosion of natural deposits

Sodium and Dental Health Fluoride

	Average	Range (ppb)
Fluoride (added for dental health	0.80	0.59 - 1.10
Sodium (EPA guidance level = 20mg/L)	9.8	9.58 - 10.1

Source Water

Results of a Source Water Assessment show that activities and land uses upstream of the Grayson Co. Water Districts water source can pose potential risks to your drinking water. Under certain conditions, contaminants could be released that could get into your drinking water. These activities are of interest to the entire community because they potentially affect your health and the cost of treating your water. Activities upstream of your water supply intake are of special concern because they provide little response time to the water system operators. The Grayson County Water District treats water from Rough River Lake which is a surface water source and purchases a portion of its water from Leitchfield Utilities which also draws from Rough River Lake. Areas of high concern consist of Row Crops. These high areas of concern themselves do not represent a danger to the environment. It is the potential for run-off of herbicides, pesticides, and other chemicals accidentally spilling into the water source from these sites that gives them the Susceptibility Ranking of High. The overall Susceptibility Ranking for this water source is Moderate. This complete report is available at the Grayson County Water Treatment Plant, 517 Waterside Dr, Falls of Rough, KY 40119. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hot line (800-426-4791).

The sources of drinking water (both tap water and bottled water) rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and may 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, (sewage plants, septic systems, livestock operations, or wildlife). Inorganic contaminants, such as salts and metals, (naturally occurring or from storm water runoff, wastewater discharges, oil and gas production, mining, or farming). Pesticides and herbicides, (storm water runoff, agriculture or residential uses). Organic chemical contaminants, including synthetic and volatile organic chemicals, (by-products of industrial processes and petroleum production, or from gas stations, storm water runoff, or septic systems). Radioactive contaminants, (naturally occurring or from oil and gas production or 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. FDA regulations establish limits for contaminants in bottled water to provide the same protection for public health. You may contact James Hale at (270) 879-8632 for more information about this Consumer Confidence Report or the Source Water Assessment.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Unregulated Contaminants (UCMR4)

Your drinking water has been sampled for a series of unregulated contaminants. Unregulated contaminants are those that EPA has not established drinking water standards. There are no MCLs and therefore no violations if found. The purpose of monitoring for these contaminants is to help EPA determine where the contaminants occur and whether they should have a standard. As our customers, you have a right to know that these data are available. If you are interested in examining the results, please contact our office during normal business hours.

Information about Lead

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. Grayson County Water District 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 °ushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking WaterHot line or at: http://www.epa.gov/safewater/lead.

Este informe contiene información importante sobre su agua potable. Pida que alguien traducir para usted, o hablar con alguien que lo entiende.