



TOWN OF BOONSBORO

21 NORTH MAIN STREET ♦ BOONSBORO, MARYLAND 21713

WWW.TOWN.BOONSBORO.MD.US ♦ 301-432-5141

BOONSBORO/KEEDYSVILLE REGIONAL WATER SYSTEM 2022 ANNUAL DRINKING WATER QUALITY REPORT, PWSID #0210002

We are very pleased to present to you the Boonsboro/Keedysville Regional Water System's Annual Drinking Water Quality Report for the 2022 calendar year. Our goal is to consistently provide you with a safe and dependable supply of drinking water by continuing to improve the water treatment process and taking extra steps to protect our valuable water resources. We are committed to ensuring the safe quality of the water that reaches your tap, as reflected in the monitoring results included with this report.

Your drinking water comes from the Tomstown Dolomite, a geological formation made of carbonate rock, which forms an aquifer feeding a combination of wells and springs which is filtered, chlorinated, and processed with fluoride through the Boonsboro and Keedysville Water Treatment Plants. The plants process water from four sources; the Keedysville Spring, the Warrenfeltz Spring, Well 8 in Graystone, and the Shafer Park Well; all ground water sources under direct influence of surface water. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. The Boonsboro/Keedysville Water system staff diligently monitor contaminants in your drinking water, ensuring safety according to Federal and State laws. Maryland Department of the Environment (MDE) has conducted a source water assessment which is available upon request and online:

http://www.mde.state.md.us/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/wa.aspx.

Your water is tested because all sources of drinking water are subject to potential contamination by substances that are naturally occurring or man-made. As water travels over the land or underground, it can pick up substances or contaminants such as: 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 or 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; and Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

Is my water safe? Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health risks can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791. 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 for contaminants in bottled water which must provide the same protection for public health. Some people may be more vulnerable to contaminants in drinking water than the general population. **Boonsboro/Keedysville Regional Water System meets all Federal (EPA) and State (Maryland) regulatory requirements.** If any of the Maximum Contaminant Levels (MCLs) or reporting requirements were exceeded or violated during the period that this report covers, the health effects and reasons for the violations would be stated in this report.

Do I need to take special precautions? Immuno-compromised persons such as those 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 EPA Safe Drinking Water Hotline (800-426-4791). 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. Boonsboro/Keedysville Regional Water System is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact The Town of Boonsboro and info@townofboonsboro.com. Information on lead in drinking water, testing methods, and steps you can take to



TOWN OF BOONSBORO

21 NORTH MAIN STREET ♦ BOONSBORO, MARYLAND 21713

WWW.TOWN.BOONSBORO.MD.US ♦ 301-432-5141

minimize exposure is available at <http://www.epa.gov/safewater/lead>. To learn more about your town's water system, please consider attending the monthly meeting of the Boonsboro Municipal Utilities Commission or the Keedysville Water Board. For information regarding meeting dates, times, and locations, please contact your local town hall or visit www.town.boonsboro.md.us and www.keedysvillemd.com.

The table below represents drinking water contaminants detected for the 2022 calendar year. Some of the data represented in this report is more than one year old. This is because the state allows us to monitor for some contaminants less than once per year because the concentration of these contaminants does not change frequently.

Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorine	2022	1	0.9 - 1	MRDLG = 4	MRDL = 4	ppm	N	Water additive used to control microbes.
Haloacetic Acids (HAA5)	2022	3	0 - 7.1	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2022	6	0 - 12.5	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Fluoride	2022	0.2	0.16 - 0.2	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2022	5	3 - 4.7	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	12/04/2020	0.00236	0.00219 - 0.00296	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest single measurement	5 NTU	0.09 NTU	N	Soil runoff.
Lowest monthly % meeting limit	1.0 NTU	100%	N	Soil runoff.

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

Lead and Copper

Definitions:

Action Level Goal (ALG): The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Lead and Copper	Likely Source of Contamination
Copper	2021	1.3	1.3	0.196	0	ppm	Copper	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2021	0	15	3.26	0	ppb	Lead	Corrosion of household plumbing systems; Erosion of natural deposits.

Violations Table

Fluoride			
Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of childrens teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of teeth, and occurs only in developing teeth			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE MAJOR	01/01/2020	12/31/2022	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.



TOWN OF BOONSBORO

21 NORTH MAIN STREET ♦ BOONSBORO, MARYLAND 21713

WWW.TOWN.BOONSBORO.MD.US ♦ 301-432-5141

PFAS Statement

PFAS – or per- and polyfluoroalkyl substances – refers to a large group of more than 4,000 human-made chemicals that have been used since the 1940s in a range of products, including stain- and water-resistant fabrics and carpeting, cleaning products, paints, cookware, food packaging and fire-fighting foams. These uses of PFAS have led to PFAS entering our environment, where they have been measured by several states in soil, surface water, groundwater, and seafood. Some PFAS can last a long time in the environment and in the human body and can accumulate in the food chain.

Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. PFOA and PFOS are two of the most prevalent PFAS compounds. PFOA concentrations from samples taken from our water system in 2022 ranged from 1.07 – 3.48 parts per trillion (ppt); PFOS concentrations from samples taken from our water system in 2022 ranged from 1.19 – 3.75 ppt. In March 2023, EPA announced proposed Maximum Contaminant Levels (MCLs) of 4 ppt for PFOA and 4 ppt for PFOS, and a Group Hazard Index for four additional PFAS compounds. Future regulations would require additional monitoring as well as certain actions for systems above the MCLs. EPA will publish the final MCLs and requirements by the end of 2023 or beginning of 2024. Additional information about PFAS can be found on the MDE website: mde.maryland.gov/PublicHealth/Pages/PFAS-Landing-Page.aspx

Unregulated Contaminants

PFAS Compound	Collection Date	Highest Level Detected (ppt)	Range		Violation
			Low (ppt)	High (ppt)	
PFOA	10/12/2022	3.48	1.07	3.48	No
PFOS	10/12/2022	3.75	1.19	3.75	No
PFHxS	10/12/2022	3.36	1.21	3.36	No
PFBS	10/12/2022	5.32	1.59	5.23	No

For more information or questions regarding this report, please contact Yvette May, Administrative Assistant at 301-432-5141 or adminassist@townofboonsboro.com or visit the EPA website at www.epa.gov/safewater.