



BOONSBORO/KEEDYSVILLE REGIONAL WATER SYSTEM 2025 ANNUAL DRINKING WATER QUALITY REPORT, PWSID #0210002

We are pleased to present to you the Boonsboro/Keedysville Regional Water System's Annual Drinking Water Quality Report for the 2025 calendar year. This report is intended to provide you with information about your drinking water and the efforts made by the water system to provide safe drinking water. (Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien).

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 the 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 monitors 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 at 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, 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 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 amounts 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. 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 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 - including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

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

Do I need to take special precautions? Immuno-compromised people such as those with cancer undergoing chemotherapy, people 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 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 Maryland Department of the Environment has performed Source water assessment and info is accessible on their website at: https://mde.maryland.gov/programs/Water/water_supply/Source_Water_Assessment_Program/Pages/by_county.aspx.

In the tables below, you will find many terms and abbreviations you might not be familiar with. To help you understand these terms better, we have provided the following definitions:

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

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Maximum Contaminant Level or 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 or MCLG: 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.

Maximum residual disinfectant level goal or 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.

Maximum residual disinfectant level or 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.

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Avg: Average - Regulatory compliance with some MCLs are based on running annual average of monthly samples.

ND: Non-detect – Constituent was not present or was present at levels below the detection limit of the testing method.

LRAA: Locational Running Annual Average

mrem: millirems per year (a measure of radiation absorbed by the body)

ppt: One part per trillion is equivalent to one nanogram (ng/L) per liter. A single drop of food coloring in 18 million gallons of water.

ppb: micrograms per liter (ug/L) or parts per billion - or one ounce in 7,350,000 gallons of water.

ppm: milligrams per liter (mg/L) or parts per million - or one ounce in 7,350 gallons of water

picocuries per liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

na: not applicable.

Our water system tested a minimum of 5 sample(s) per month in accordance with the Total Coliform Rule for microbiological contaminants. With the microbiological samples collected, the water system collects disinfectant residuals to ensure control of microbial growth.

| Disinfectant | Date | Highest RAA | Unit | Range | MRDL | MRDLG | Typical Source |
|--------------|------|-------------|------|-----------|------|-------|---|
| CHLORINE | 2025 | 1.1 | ppm | 0.8 - 1.4 | 4 | 4 | Water additive used to control microbes |

| Disinfection Byproducts | Period | Highest LRAA | Range | Unit | MCL | MCLG | Typical Source |
|-------------------------------|--------|--------------|----------|------|-----|------|---|
| TOTAL HALOACETIC ACIDS (HAA5) | 2025 | 1 | 0 – 2.2 | ppb | 60 | 0 | By-product of drinking water disinfection |
| TTHM | 2025 | 5 | 0 – 11.8 | ppb | 80 | 0 | By-product of drinking water chlorination |

Lead & Copper

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. If you are concerned about lead in your water and wish to have your water tested, contact BOONSBORO - KEEDYSVILLE at 301-432-7600 or TownManager@townofboonsboro.com. An initial inventory of service line pipe materials located within our service area was submitted to the Maryland Department of the Environment (MDE) on October 16, 2024. As a result, the Service Line Inventory requirement was fulfilled and is available upon request.

| Lead and copper | Date Sampled | Units | Action Level (AL) | Action Level Goal (ALG) | No. of Samples | 90 th Percentile | Range of levels detected | Sites Over AL | Possible Sources |
|-----------------|--------------|-------|-------------------|-------------------------|----------------|-----------------------------|--------------------------|---------------|--|
| Copper | 2024 | ppm | 1.3 | 1.3 | 20 | 0.147ppm | <0.05-0.286ppm | 0 | Erosion of natural deposits; leaching from wood preservatives; Corrosion of household plumbing systems |
| Lead | 2024 | ppb | 15 | 0 | 20 | <2ppb | <2-10ppb | 0 | Corrosion of household plumbing systems; Erosion of natural deposits |

PFAS - short for 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.

The Environmental Protection Agency (EPA) announced regulations for 6 PFAS compounds in drinking water in April 2024. The MCLs for PFOA and PFOS are 4.0 parts per trillion (ppt). The MCLs for HFPO-DA (GenX), PFNA and PFHxS are 10 ppt. PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS use a Hazard Index of 1.0 (unitless) to determine if the combined and co-occurring levels of these PFAS pose a risk and require action. Public water systems have three years (by 2029) to implement solutions that reduce these PFAS if monitoring shows that drinking water levels exceed these MCLs.

The Maryland Department of the Environment (MDE) conducted a PFAS monitoring program for Community Water Systems from 2020 to 2022. The results are available on MDE's website: https://marylanddepartmentoftheenvironment.shinyapps.io/MDE_PFAS_PublicWaterSystemStudyMap/. Maryland regulations (COMAR 26.04.01.15-4) require that systems notify their customers of the results. If you are interested in examining the results or would like more information, please contact Town Hall at 21 N. Main St., Boonsboro, Md 21713 or adminassist@townofboonsboro.com or call (301)432-5141. Results from UCMR5 monitoring are made publicly available approximately once every three months on EPA's website <https://www.epa.gov/sdwa/national-contaminant-occurrence-database-ncod> or use the link found on the Town of Boonsboro's website <https://www.town.boonsboro.md.us/pfasnotification>. Our water system has sampled for a series of contaminants as required by EPA's 5th Unregulated Contaminant Monitoring Rule (UCMR5). Testing for the 5th Unregulated Contaminant Monitoring Rule began in 2023 and that testing was done for 29 PFAS compounds and Lithium.

| CONTAMINANT | UNITS | COLLECTION YEAR | AVERAGE LEVEL FOUND*MRL is Minimum Reporting Level* | RANGE OF DETECTIONS *MRL is Minimum Reporting Level* | Minimum Reporting Levels | EPA Method |
|--------------|-------|-----------------|---|--|--------------------------|------------|
| PFHxA | ppb | 2025 | .00163 | ND - 0.0089 | 0.003 | EPA 533 |
| PFBS | ppb | 2025 | 0.0013 | ND - 0.0072 | 0.003 | EPA 533 |
| PFOA | ppb | 2025 | 0.00031 | ND - 0.0067 | 0.004 | EPA 533 |
| PFPeA | ppb | 2025 | 0.0073 | ND - 0.0041 | 0.003 | EPA 533 |
| PFHxS | ppb | 2025 | 0.00031 | 0.003 - 0.0031 | 0.003 | EPA 533 |
| lithium | ppb | 2025 | <MRL | <MRL | 9 | EPA 200.7 |
| 11CI-PF3OUdS | ppb | 2025 | <MRL | <MRL | 0.005 | EPA 533 |
| 4:2 FTS | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| 6:2 FTS | ppb | 2025 | <MRL | <MRL | 0.005 | EPA 533 |
| 8:2 FTS | ppb | 2025 | <MRL | <MRL | 0.005 | EPA 533 |
| 9CI-PF3ONS | ppb | 2025 | <MRL | <MRL | 0.002 | EPA 533 |
| ADONA | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| HFPO-DA | ppb | 2025 | <MRL | <MRL | 0.005 | EPA 533 |
| NFDHA | ppb | 2025 | <MRL | <MRL | 0.02 | EPA 533 |
| PFBA | ppb | 2025 | <MRL | <MRL | 0.005 | EPA 533 |
| PFDA | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| PFDoA | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| PFEESA | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| PFHpA | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| PFHpS | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| PFMBA | ppb | 2025 | <MRL | <MRL | 0.003 | EPA 533 |
| PFMPA | ppb | 2025 | <MRL | <MRL | 0.004 | EPA 533 |
| PFNA | ppb | 2025 | <MRL | <MRL | 0.004 | EPA 533 |
| PFOS | ppb | 2025 | <MRL | <MRL | 0.004 | EPA 533 |
| PFPeS | ppb | 2025 | <MRL | <MRL | 0.004 | EPA 533 |
| PFUnA | ppb | 2025 | <MRL | <MRL | 0.002 | EPA 533 |
| NetFOSAA | ppb | 2025 | <MRL | <MRL | 0.005 | EPA 537.1 |
| NMeFOSAA | ppb | 2025 | <MRL | <MRL | 0.006 | EPA 537.1 |
| PFTA | ppb | 2025 | <MRL | <MRL | 0.008 | EPA 537.1 |
| PFTrDA | ppb | 2025 | <MRL | <MRL | 0.007 | EPA 537.1 |