



# Water Quality Report 2021

T

The City of Hagerstown is pleased to provide you with the 2021 Annual Drinking Water Quality Report. This report is distributed to all our customers and provides them with information on source water, testing results, and public health guidance for environmental contaminants. The City of Hagerstown Utilities Department is committed to providing our customers with safe and reliable drinking water. Drinking water supplied to our customers has met all stringent EPA and MDE standards of quality for the year 2021. This report fulfills the Safe Water Drinking Act requirement for the Consumer Confidence Reporting Rule for water quality notification to the consuming public.

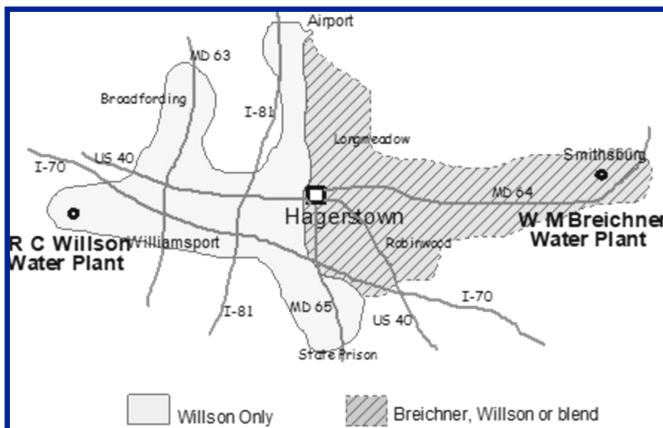
*Este informe contiene información muy importante sobre el agua que usted bebe.  
Tradúzcalo ó hable con alguien que lo entienda bien.*

## Sources of Drinking 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.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of certain contaminants. The presence of 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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

Hagerstown City water is surface water that comes from one of two City-owned treatment plants. The main facility is the R.C. Willson Water Treatment Plant which uses the Potomac River as the water source. The second facility is the W.M. Breichner Water Treatment Plant which uses the Edgemont Reservoir as its source. The Edgemont Reservoir and W.M. Breichner Plant are off-line while repairs and upgrades are made to the dam and treatment facility. Therefore, all water is currently being sourced from the R.C. Willson Water Treatment Plant.



## Contents

|        |  |
|--------|--|
| Page 1 | Introduction                               |
|        | Sources of Drinking Water                  |
| Page2  | Compliance with Safe Drinking Water Act    |
|        | Water Treatment Process                    |
|        | Testing Requirements                       |
|        | Source Water Contaminant Information       |
|        | Vulnerable Populations                     |
| Page3  | Information Statement from the EPA on Lead |
|        | What is PFAS?                              |
|        | Terms, Units & Abbreviations               |
| Page4  | Water Quality Data Table                   |

## Additional Information & Resources

For more information on your water supply or the information contained in this report you may want to contact the following agencies:

### City of Hagerstown Water Division

☎ (301) 739-8577 x680

### City of Hagerstown Environmental Laboratory

☎ (301) 739-8577 x667

### Maryland Department of the Environment

☎ 410) 537-3000 or (800) 633-6101

### U.S. Environment Protection Agency Safe Drinking Water Act Hotline

☎ (800) 426-4791

You are always welcome to attend any of the meetings of the Mayor and Council Meetings held at Council Chambers in City Hall on the 1st, 2nd, and 3rd Tuesdays of every month at 4:00 pm and on the 4th Tuesday at 7:00 pm. Please check the City website for exact times.

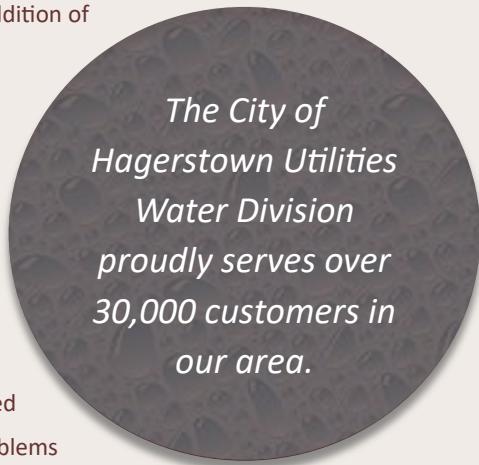
## Compliance with Safe Drinking Water Act

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.

Hagerstown City Water meets all Federal (EPA) and State (MDE) regulatory requirements. The Hagerstown Utilities Department Water Division works hard to maintain the highest quality water possible and we will continue to strive for this goal. If you have questions about this report or any other topic related to your drinking water, please feel free to call us using the numbers on page 1.

## Water Treatment Process

Our water supply source water from the Potomac River is disinfected by filtration followed by addition of chloramine prior to distribution to our customers. A corrosion inhibitor is added to minimize the dissolution of any lead or copper particles from private household plumbing. Fluoride is added to help prevent dental problems with children's teeth. Total chlorine residual is monitored daily throughout the distribution system to ensure drinking water quality.



## Testing Requirements

As mentioned previously, tests are periodically conducted for the regulated and unregulated contaminants. The table found in this report summarizes the results of our monitoring for the period of January 1, 2021 to December 31, 2021. The regulatory agencies (MDE and the EPA) have waived the requirement to sample for some contaminants that would not normally be found in our environment.

## Source Water Contaminant Information

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;
- pesticides and herbicides, which may come from a variety of sources such as agricultural, urban storm water runoff, and residential uses;
- inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharge, oil and gas production, mining, or farming;
- 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 be the result of oil and gas production and mining activities

## Vulnerable Populations

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).

---

*The Safe Drinking Water Act (SDWA) was passed in 1974 as a law to protect human public health by regulating the public drinking water supply. SDWA establishes national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants.*

## Information Statement from the EPA on 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. We are responsible for providing high quality drinking water, but we 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 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 or at <http://www.epa.gov/safewater/lead>



## What is PFAS?

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 firefighting 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.

Currently, there are no federal regulations (i.e. Maximum Contaminant Levels (MCLs) for PFAS in drinking water. However, the U.S. Environmental Protection Agency (EPA) has issued a Health Advisory Level (HAL) of 70 parts per trillion (ppt) for the sum of PFOA and PFOS concentrations in drinking water. While not an enforceable regulatory standard, when followed, the EPA HAL does provide drinking water customers, even the most sensitive populations, with a margin of protection from lifetime exposure to PFOA and PFOS in drinking water. Beginning in 2020, the Maryland Department of the Environment (MDE) initiated a PFAS monitoring program. The combined PFOA and PFOS concentration from samples taken from our water system was below the detection limit. MDE anticipates that EPA will establish an MCL for PFOA and PFOS in the near future. This would entail additional monitoring. Additional information about PFAS can be found on the MDE website:

<http://www.mde.maryland.gov>

## Terms, Units & Abbreviations

**Action Level:** 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.

**AVG:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**Level 1 Assessment:** 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 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.

**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**– A target level for contaminants below which there is no known or expected health risk. MCLGs allow for a margin of safety.

**MRDL: Maximum Disinfectant Residual Level**– 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.

**MDRLG: Maximum Disinfectant Residual Level Goal**– The level of a drinking water disinfectant below which there is no known or expected health risk. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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

**N/A:** Not applicable

**ppm:** Milligrams per liter or parts per million; equal to one ounce in 7,350 gallons of water.

**ppb:** Micrograms per liter or parts per billion; equal to one ounce in 7,350,000 gallons of water.

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

# Water Quality Data Table

**DISINFECTANTS AND DISINFECTION BY-PRODUCTS** \*Values for TTHM and HAAs are the highest Locational Running Annual Averages (LRAs) for 2021

| Regulated Contaminants        | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG              | MCL          | Violation | Typical Sources                                     |
|-------------------------------|-----------------|------------------------|--------------------------|-------------------|--------------|-----------|---|
| Chlorine                      | 2021            | 2.8 ppm                | 2.7 - 2.8 ppm            | MRDLG = 4 ppm     | MRDL = 4 ppm | NO        | Water additive to control microbes.                 |
| Total Haloacetic Acids (HAAs) | 2021            | 12 ppb                 | 0 - 23.54 ppb            | No goal for Total | 60 ppb       | NO        | By-products of drinking water disinfection process. |
| Total Trihalomethanes (TTHM)  | 2021            | 27 ppb                 | 8.57 - 40.12 ppb         | No goal for Total | 80 ppb       | NO        | By-products of drinking water disinfection process. |

## INORGANIC CONTAMINANTS

| Regulated Contaminants         | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG    | MCL     | Violation | Typical Sources  |
|--------------------------------|-----------------|------------------------|--------------------------|---------|---------|-----------|--|
| Barium                         | 2021            | 0.042 ppm              | 0 - 0.042 ppm            | 2 ppm   | 2 ppm   | NO        | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.                                |
| Chromium                       | 2021            | 1.2 ppb                | 0 - 1.2 ppb              | 100 ppb | 100 ppb | NO        | Discharge from steel and pulp mills; erosion of natural deposits.  |
| Fluoride                       | 2021            | 0.6 ppm                | 0.59 - 0.59 ppm          | 4 ppm   | 4 ppm   | NO        | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories. |
| Mercury                        | 2021            | 0.23 ppb               | 0 - 0.23 ppb             | 2 ppb   | 2 ppb   | NO        | Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.         |
| Nitrate (measured as Nitrogen) | 2021            | 0.46 ppm               | 0.46 - 0.46 ppm          | 10 ppm  | 10 ppm  | NO        | Runoff from fertilizer use; Leaching from septic tanks, sewage; erosion of natural deposits                                |

**LEAD AND COPPER:** tested at customer's taps. Testing is conducted every 3 years.

| Regulated Contaminant | Date Sampled | MCLG    | AL      | 90th Percentile | # Sites Over AL | Violation | Typical Sources   |
|-----------------------|--------------|---------|---------|-----------------|-----------------|-----------|---|
| Lead                  | 9/19/2019    | 0 ppb   | 15 ppb  | 0.63            | 0               | NO        | Corrosion of household plumbing systems; erosion of natural deposits                                    |
| Copper                | 9/19/2019    | 1.3 ppb | 1.3 ppm | 0.0539          | 0               | NO        | Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems. |

**TURBIDITY:** 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

|                                | Limit (TT) | Level Detected | Violation | Typical Sources |
|--------------------------------|------------|----------------|-----------|-----------------|
| Highest Single Measurement     | 1.0 NTU    | 0.03 NTU       | NO        | Soil runoff     |
| Lowest Monthly % meeting limit | 0.3 NTU    | 100%           | NO        | Soil runoff     |

## TOTAL ORGANIC CARBON

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC requirements

## PFAS INFORMATION

| Contaminant | Date Sampled | HAL LIMIT | Level Detected | Violation | Typical Sources   |
|-------------|--------------|-----------|----------------|-----------|---|
| PFOA + PFOS | 2020         | 70 ppt    | Non-Detect     | NO        | Human-made chemicals found in stain-and water-resistant fabrics, carpeting, cleaning products, paints, cookware, food packaging, and fire-fighting foams. |

\*All results on this data table are for the R.C. Willson Plant only, the W.M. Breichner Plant was offline for this period of monitoring