

## FOREST HILLS MD RIVA CHASE 2023 Drinking Water Quality Report Covering Data For Calendar Year 2022

*Public Water System ID:* CO0130033

**Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact JULIE SORENSEN at 720-287-0605 with any questions or for public participation opportunities that may affect water quality. **Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.**

### General Information

All 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 the 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 (1-800-426-4791) or by visiting [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** 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:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

### Lead in Drinking Water

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 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 JULIE SORENSEN at 720-287-0605. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

### Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit [wqcdcompliance.com/ccr](http://wqcdcompliance.com/ccr). The report is located under “Guidance: Source Water Assessment Reports”. Search the table using system name or ID, or by contacting JULIE SORENSEN at 720-287-0605. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that ***could*** occur. It ***does not*** mean that the contamination ***has or will*** occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed on the next page.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

### Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
WELL NO 10 (Groundwater-Well) WELL NO 2A (Groundwater-Well) WELL NO 8 (Groundwater-Well) WELL NO 3 (Groundwater-Well) WELL NO 4 (Groundwater-Well) WELL NO 5 (Groundwater-Well) WELL NO 6 (Groundwater-Well) WELL NO 7 (Groundwater-Well) WELL NO 1 (Groundwater-Well) WELL NO 9 (Groundwater-Well) PURCHASED FROM CO0130035 GENESEE WSD (Surface Water-Consecutive Connection)	Solid Waste Sites, Existing/Abandoned Mine Sites, Commercial/Industrial/Transportation, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Deciduous Forest, Evergreen Forest, Septic Systems, Road Miles

## Terms and Abbreviations

- **Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.
- **Treatment Technique (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **Health-Based** – A violation of either a MCL or TT.
- **Non-Health-Based** – A violation that is not a MCL or TT.
- **Action Level (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 Contaminant Level Goal (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 (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.
- **Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.
- **Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.
- **Variance and Exemptions (V/E)** – Department permission not to meet a MCL or treatment technique under certain conditions.
- **Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.
- **Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.
- **Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **Compliance Value (No Abbreviation)** – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90<sup>th</sup> Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).
- **Average (x-bar)** – Typical value.
- **Range (R)** – Lowest value to the highest value.
- **Sample Size (n)** – Number or count of values (i.e. number of water samples collected).
- **Parts per million = Milligrams per liter (ppm = mg/L)** – One part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion = Micrograms per liter (ppb = ug/L)** – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Not Applicable (N/A)** – Does not apply or not available.
- **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.



## Detected Contaminants

FOREST HILLS MD RIVA CHASE routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2022 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one-year-old. Violations and Formal Enforcement Actions, if any, are reported in the next section of this report.

**Note:** Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

<b>Disinfectants Sampled in the Distribution System</b>						
<b>TT Requirement:</b> At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <b><i>OR</i></b> If sample size is less than 40 no more than 1 sample is below 0.2 ppm						
<b>Typical Sources:</b> Water additive used to control microbes						
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2022	Lowest period percentage of samples meeting TT requirement: 100%	0	1	No	4.0 ppm

<b>Lead and Copper Sampled in the Distribution System</b>								
Contaminant Name	Time Period	90 <sup>th</sup> Percentile	Sample Size	Unit of Measure	90 <sup>th</sup> Percentile AL	Sample Sites Above AL	90 <sup>th</sup> Percentile AL Exceedance	Typical Sources
Copper	07/29/2021 to 07/30/2021	0.39	5	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/29/2021 to 07/30/2021	3	5	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

<b>Disinfection Byproducts Sampled in the Distribution System</b>									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2020	4.9	4.9 to 4.9	1	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2020	32	32 to 32	1	ppb	80	N/A	No	Byproduct of drinking water disinfection

**Inorganic Contaminants Sampled at the Entry Point to the Distribution System**

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Arsenic	2020	3	3 to 3	1	ppb	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2020	0.21	0.21 to 0.21	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2020	7	7 to 7	1	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2020	0.2	0.2 to 0.2	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2022	1.4	1.4 to 1.4	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2020	9	9 to 9	1	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

**Secondary Contaminants\*\***

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2020	27.1	27.1 to 27.1	1	ppm	N/A



**Violations, Significant Deficiencies, and Formal Enforcement Actions**

**No Violations or Formal Enforcement Actions**

**Consumer Drinking Water Notice Included**

**CONSUMER DRINKING WATER NOTICE  
FOREST HILLS MD-RIVA CHASE, PWS ID: CO0130033**

**IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER**

FOREST HILLS MD-RIVA CHASE voluntarily participated in proactive testing for a group of unregulated chemicals scientifically known as per- and polyfluoroalkyl substances or PFAS. The water sample results received from a state approved laboratory on January 24, 2023 showed that certain PFAS chemicals, PFOA and/or PFOS, are present in the drinking water. The EPA has lowered the health advisories to foster partnerships to reduce exposure to PFAS. The FOREST HILLS MD-RIVA CHASE is working closely with the Colorado Department of Public Health and Environment (CDPHE) to understand and address this concern. FOREST HILLS MD-RIVA CHASE is just one of many communities in the state of Colorado and throughout the United States being proactive in sampling PFAS as these new monitoring requirements are implemented.

These human-made chemicals (PFAS) have been used in firefighting foam and other consumer products and can affect your health. For more information on PFAS, please visit the CDPHE website: <https://cdphe.colorado.gov/pfas>

- Other known PFAS sources are:
- Nonstick cookware
- Grease-resistant and waterproof coatings on food packaging (e.g., popcorn bags, takeout containers, and fast-food wrappers)
- Coated paper products
- Waterproof, water-resistant, and stain-resistant textiles (e.g., clothing, shoes, upholstery, and carpets)
- Cosmetics and personal care products
- Industrial and household cleaning products
- Floor, car, and boat waxes
- Engineered coatings used in semiconductor production
- Metal plating and finishing
- Etching of metals, plastics, and glass
- Plastics, resins, and rubber products
- Surface coating, paint, varnish, and inks
- Cable and wire insulation for electronics
- Aqueous Film-Forming Foam (AFFF) used to extinguish flammable liquid fires
- Biosolids

Through state funding, in 2020 the finished water was tested showing elevated levels. Testing was again conducted in 2022 in which nine wells and two nearby surface waters were tested resulting in elevated levels. Below is the combined data from 2020 and 2022. **PLEASE NOTE: The EPA is currently proposing revised limits of 4.0 ppt.**

PFAS	Interim health advisory	The level in your water:	What this means:
PFOA	0.004 parts per trillion	17 - 0 ppt	This is above the health advisory. District is taking action to reduce your exposure, please read further.
PFOS	0.02 parts per trillion	7.2 - 1.8 ppt	This is above the health advisory. District is taking action to reduce your exposure, please read further.

These health advisories are set to protect all people, including sensitive populations and life stages (such as infants), from negative health impacts as a result of lifetime exposure to PFAS in drinking water.

The current health advisories for PFOA and PFOS are based on human studies in populations exposed to these chemicals. PFOA and PFOS can:

- Impact the immune system.
- Increase cholesterol.
- Decrease infant birth weight.
- Cause changes in liver function.
- Cause preeclampsia and high blood pressure during pregnancy.
- Cause effects on thyroid hormones.
- Increase the risk of kidney and testicular cancer (PFOA).

#### More vulnerable populations

Children ages 0-5 years, and people who are pregnant, planning to become pregnant, or breastfeeding are more susceptible to health impacts from these chemicals. Visit <https://cdphe.colorado.gov/pfas-health> for more information.

#### What actions should I consider? What does this mean?

- People do not need to stop drinking their water.
  - There is not an immediate public health risk, and people do not need to stop drinking their water at this time.
  - CDPHE will keep providing facts to help inform the public on the latest science.
  - There are certain higher risk groups that may want to reduce their exposure (ex: more vulnerable populations).
- People can reduce their exposure from drinking water by using water treated by an [in-home water treatment filter](#) that is certified to lower the levels of PFAS or by using bottled water that has been treated with reverse osmosis for drinking, cooking, and preparing baby formula. Use tap water for bathing, showering, brushing teeth, washing hands, watering yards, washing dishes, cleaning, and laundry.
  - Using bottled water is an individual choice, but there are important concerns with bottled water. CDPHE cannot verify that all bottled water is below PFAS interim health advisories. Reverse osmosis is a treatment that removes PFAS. We recommend people who use bottled water choose a brand that has been treated with reverse osmosis and includes this language on the bottle. Additionally, bottled water does not contain fluoride to support oral health and creates solid waste and other environmental concerns.
  - Boiling, freezing, or letting water stand does not reduce PFAS levels.
- There are many sources of PFAS in the environment, people may consider reducing exposure from other sources. Visit <https://cdphe.colorado.gov/pfas-health> to learn more.
- If you have specific health concerns, talk to your doctor. An information sheet, “Talking to your health care provider about PFAS,” is available at <https://bit.ly/PFAS-doctor>.

#### What is FOREST HILLS MD-RIVA CHASE doing to address the situation?

We are working to address this situation in coordination with CDPHE. We will continue to provide information about this situation. The District submitted a grant application on March 17, 2023 to seek infrastructure funding for alternative PFAS treatment and removal. The grant is being reviewed and, if accepted, will be awarded May 1, 2023. Additional PFAS information can be found at [www.colorado.gov/cdphe/pfas](http://www.colorado.gov/cdphe/pfas). For more information, please contact Ronda Zivalich, District Manager at 720-334-1741 or 14405 W Colfax Ave, Ste 165, Lakewood, CO 80401. You may also view our website for this information, additional information, and updates as more data becomes available at [Forest Hills Metropolitan District \(fhmd.net\)](http://ForestHillsMetropolitanDistrict(fhmd.net)).

If you have questions about this information, you can also contact CO HELP at 303-389-1687 or 1-877-462-2911.

*Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, tenants, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in public places or by distributing copies by hand.*