WATER DEMAND REPORT

FOR

VILLAGE AT LORSON RANCH FIL 1 FINAL PLAT

April, 2024

Prepared for:

Lorson, LLC 212 N. Wahsatch, Suite 301 Colorado Springs, Colorado 80903 Contact: Jeff Mark (719) 635-3200

Prepared by:

Core Engineering Group 15004 1st Avenue S. Burnsville, MN 55306 719-570-1100

Project No. 100.070

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ANNUAL UPDATE TO THE WWSD DISTRICT WATER AND WASTEWATER REPORT, 2023

1.0 INTRODUCTION

The proposed 1361.4 acre Lorson Ranch is located in El Paso County and is bounded on the west by Marksheffel Road, the east by existing ranch land and the future Meridian Road, the north by Banning Lewis Ranch and unplatted property, and on the south by Peaceful Valley Estates, a rural and urban residential subdivision and the Appletree golf course. *Village at Lorson Ranch Filing No. 1* is a 9.725 acre site within Lorson Ranch. The site is located north of Fontaine Boulevard, and west of Carriage Meadows Drive, and east of Marksheffel Road on a vacant tract of land.

The legal description for this site is:

Tract D, Carriage Meadows North at Lorson Ranch Filing No. 1 as recorded in Reception No. 218714242)

This site contains 6 commercial lots and several tracts for open space.

2.0 WATER SUPPLY

The development is located within the service boundary of the Widefield Water and Sanitation District (WWSD). A commitment letter is included in Appendix A from WWSD for this project.

Existing Infrastructure

Village at Lorson Ranch Filing No. 1 is located in Pressure Zone 6 (upper zone). WWSD has two existing 12" diameter potable water mains on-site that were stubbed out from Fontaine Blvd/Carriage Meadows Drive to provide water service.

See the annual update to the WWSD Water Report located in Appendix B for availability of water, projected demand, future sources, and future district infrastructure.

Water Serviceability

The WWSD's has a current developed physical water supply of 5271 ac-ft of water per year and the three year running average actual use is 2898 ac-ft per year which is 55% of the existing available physical supply.

Water Demand

Water Demand calculations were completed based on the proposed zoning and densities and water usage calculations for commercial developments provided by WWSD.

Usage Rates per WWSD:

1.53ac-ft/year per ac of Food

1.53ac-ft/year per ac of comm/retail

0.7ac-ft/year per ac of retail

2.1ac-ft/year per ac of gas station

2.23ac-ft/year per ac of irrigation of landscaping

Lot 1 (gas station)	Lot 2 (food)
1.60 ac site	1.26ac site
1.53 x 1.60ac = 2.44ac-ft.	1.53 x 1.26ac = 1.93ac-ft
Lot 3 (food)	Lot 4 (food)
0.88ac site	0.88ac site
1.53 x 0.88ac = 1.34ac-ft	1.53 x 0.88ac = 1.34ac-ft
Lot 5 (retail)	Lot 6 (storage)
1.08ac site	1.7ac site
0.7 x 1.08 = 0.8ac-ft	0.7 x 1.7ac = 1.19ac-ft
<u>Irrigation (landscaping)</u> 25000sf = 0.5739ac 2.23 x 0.5739 = 3.88ac-ft	

The new water commitments are 12.93 ac-ft per year for the 6 lots and the landscaping

3.0 SUMMARY AND CONCLUSIONS

The maximum allowable water demand are as follows:

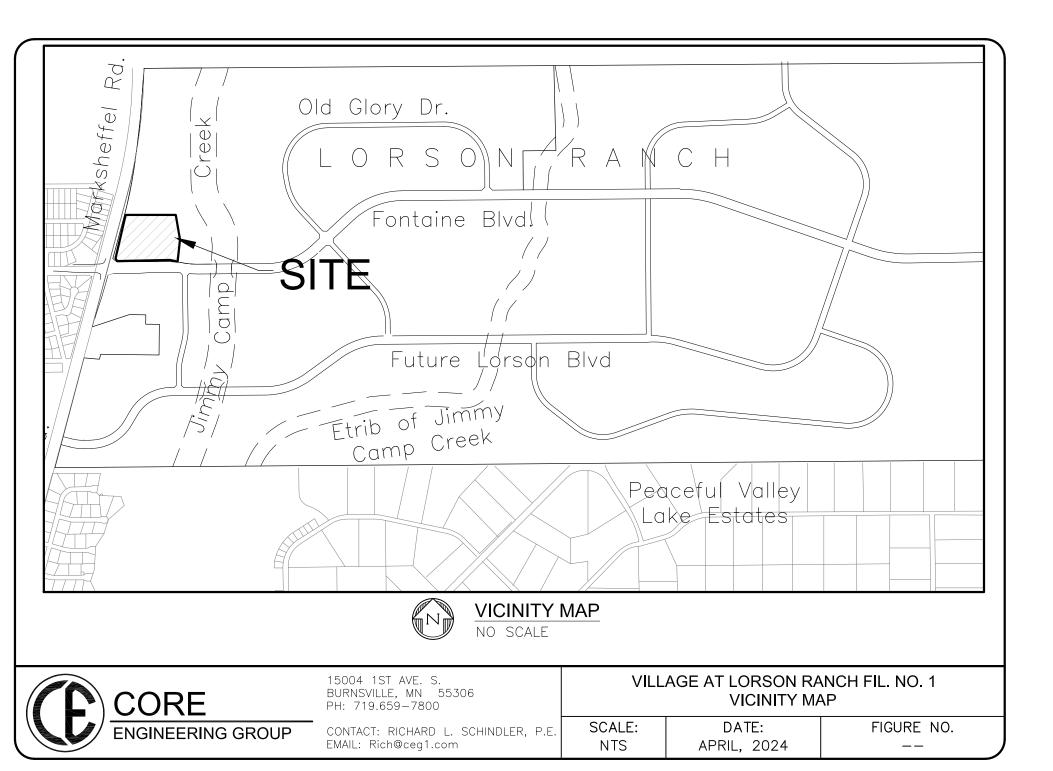
Item	ac. ft./yr	Avg. Daily Flow (gpd)
Water Demand	12.93	11,536

The Widefield Water and Sanitation District has an excess capacity in their existing water supply system to serve this subdivision

Construction costs of proposed off-site infrastructure have not been included in this report since the infrastructure is located within Lorson Ranch adjacent to this site.

In conclusion, the proposed development is within the limits of the District's ability to serve it with water supply. Water infrastructure is onsite, thus, no unusual costs will be incurred by the district or the Developer in developing this project.

APPENDIX A – VICINITY MAP, WATER SUPPLY INFORMATION, COMMITMENT LETTER, WWSD DESIGN MEMO



WATER SUPPLY INFORMATION SUMMARY

Section 30-28-133,(d), C.R.S. requires that the applicant submit to the County,"Adequate evidence that a water supply that is sufficient in terms of quantity, quality and dependability will be available to ensure an adequate supply of water.

1. NAME OF DEVELOPMENT AS PRO VILLAGE AT LORSON RA		. 1						
2. LAND USE ACTION SF								
3. NAME OF EXISTING PARCEL AS RECORDED								
SUBDIVISION								
4. TOTAL ACREAGE 9.725	5. NUMBER OF LO	TS PROPOSED 6	PLAT MAP ENCLOSED	YES				
6. PARCEL HISTORY - Please attach o	opies of deeds, plat	s or other evidence	or documentation.					
A. Was parcel recorded with county p B. Has the parcel ever been part of a If yes, describe the previous action	ior to June 1, 1972 division of land activ	? 🗆 YES X NO on since June 1; 1	972? 🗆 YES 🗆 NO					
7. LOCATION OF PARCEL - Include a I	nap deliniating the p	roject area and tie	to a section comer.	• •				
	section		$5 \square N X S RANGE$	EXW				
8. PLAT - Location of all wells on prop Surveyors plat	erty must be plotted No	l and permit numb If not, scaled ha	ers provided. nd drawn skatch 🗇 Yes 🗆 No					
9. ESTIMATED WATER REQUIREMENT	S - Gallons per Day or	Acre Fest per Year	10. WATER SUPPLY SOURCE	-				
HOUSEHOLD USE # of units COMMERCIAL USE # $\frac{6 \text{ LOTS}}{2}$ of S.F.	8,074 GPD	9.05 AF		NEW WELLS - PROPOSED ADUFERS - [CHECK OND] ALLIVAL UPPER ARAPAHOE UVPER DAWSON- LOWER DAWSON- LOWER DAWSON- DAKOTA OTHER				
IRRIGATION # 0.57 of acres			-					
STOCK WATERING # of head		AF	ASSOCIATION COMPANY X DISTRICT	WATER COURT DECREE CASE NO.'S				
TOTAL	· 11,536 GPD	<u>12.93</u> AF	NAME WIDEFIELD W & S Letter of commitment for Service I yes I no					
11. ENGINEER'S WATER SUPPLY REPO	RT 🗆 YES 🗆 N	IO IF YES, PLEA	SE FORWARD WITH THIS FORM. (This r	may be required before our review is completed.)				
12. TYPE OF SEWAGE DISPOSAL SYST	EM							
SEPTIC TANK/LEACH FIELD X CENTRAL SYSTEM - DISTRICT NAME WIDEFIELD W & S DISTRICT								
I LAGOON	J LAGDON							
ENGINEERED SYSTEM (Allach a copy	of engineering design)	D OTHER						
				· · · · · · · · · · · · · · · · · · ·				

RESPEC

TECHNICAL MEMORANDUM

- To: Rob Bannister Widefield Water and Sanitation District 8495 Fontaine Boulevard Colorado Springs, CO 80925
- From: Gwen Dall, PE Hayden Dallmeyer RESPEC 5540 Tech Center Drive, Suite 100 Colorado Springs, CO 80919

Date: April 1, 2024

Subject: Fire Flow for Lorson Far East - Commercial

BACKGROUND AND SUMMARY

Table 1: Planned Development

This fire flow analysis was completed to consider the flow and pressure available to serve commercial lots within the Widefield Water and Sanitation District (WWSD) service areas described as Tract D in Carriage Meadows North Filing Number 1 referenced by schedule number 5515413054. The proposed development is generally bound by residential housing along Borderpine Way (north of area), Carriage Meadows Dr (east of area), Fontaine Blvd (south of area) and S Marksheffel Rd (west of area). This area is expected to include 6 commercial buildings ranging from a gas station to a KinderCare facility. The developer provided the estimate of water provided in Table 1 and the layout shown in Figure 1.

Further descriptions of each land use included within this commercial development can be seen below in the Demands section. This report defines the data utilized and the overall model results.

Land Use	Area (ac)	Building (sq ft)
Gas Station	1.60	5,400
McDonalds	1.26	3,500
Fast Food 1	0.88	2,000
Fast Food 2	0.88	2,000
KinderCare	1.08	
Mini-storage	1.70	
Irrigation (landscaping)	0.57	25,000 (area landscaped)



5540 TECH CENTER DRIVE SUITE 100 Colorado Springs, co 80919 719.227.0072

RESPEC

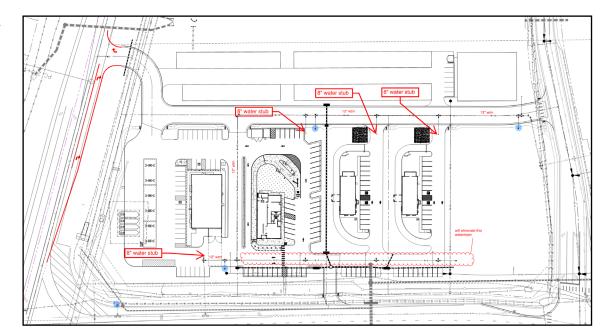


Figure 1: Development Layout

MODEL DATA

DEMANDS

The City of Fountain commercial water metrics as defined in Table 2 were used to estimate the Single Family Equivalents (SFEs) for the planned development. Using these metrics, the estimate demand for the development was calculated as 34.5 SFEs or a maximum day demand of 20,697 gallons.

Commercial Usage	Peak Day SFE Per Acre	Acre-Feet per Year per Acre	Peak Day SFE Per 5,000 SF of Structure
Food	4.6	2.1	7
Retail	2.3	0.7	2
Combined Food/Retail	3.9	1.7	4.3
Medical	2.3	0.9	2.5
Gas Station	6.5	2.1	16.8

Table 2: Fountain Commercial Water Metrics

Peak Day is calculated as the average demand for the peak month. 1 SFE = 600 Gallons

Source: Fountain Commercial Water Metrics (shareable).xls



Table 3: Calculated Demand for the Development

Land Use	Area (ac)	Peak Day SFE per Acre	Acre-Ft Per Year per Acre	Peak Day SFE (SFE)	Acre-Ft Per Yr (AF)	Average Demand (GPD)	Peak Day (GPD)	Peak Day (GPM)
Gas Station	1.60	6.50	2.10	10.40	3.36	3,000	6,240	4.33
McDonalds	1.26	4.60	2.10	5.80	2.65	2,362	3,478	2.42
Fast Food 1	0.88	4.60	2.10	4.05	1.85	1,650	2,429	1.69
Fast Food 2	0.88	4.60	2.10	4.05	1.85	1,650	2,429	1.69
KinderCare	1.08	2.30	0.70	2.48	0.76	675	1,490	1.04
Mini-storage	1.70	2.30	0.70	3.91	1.19	1,062	2,346	1.63
Landscape Irrigation*	0.57	6.64	2.23	3.81	1.28	1,143	2,285	1.59
Totals				34.49	12.93	11,541	20,697	14.37

* Landscape Irrigation was estimated based on previous reports and was not taken from the Fountain spreadsheet.

ELEVATIONS

This area is within Pressure Zone 5 of the Widefield Water and Sanitation District which is served by the 4.0 MG Goldfield Ground Storage Tank located southwest of the proposed commercial site. Specific tank information can be found below.

- 4.0 MG Ground Storage Tank
 - Ground Elevation = 5,898 FT
 - MIN HGL = 5,926 FT
 - MAX HGL = 5,938 FT
 - Assumed Typical Tank Level = 27 ft (HGL of 5925 FT)

Proposed elevations for the development were provided by the developer and extracted from 100.070 topo.dwg provided on March 25, 2024 for the junctions. The highest elevation was assumed as 5712 feet and the lowest elevation at 5707 feet.





Figure 2: Elevations Assumed in the Model

PIPING ARRANGEMENT

The piping throughout the proposed commercial site was extracted from the AutoCAD base file drawings from the Core Engineering Group, dated 02/21/2024. The piping linework was also based on the '2.19.2024 wtm to Rob' along with the '2.21.2024 layout1' pdfs provided by Core Engineering Group.



Figure 3. Piping Arrangement for Commercial Lots



PRESSURE

Service pressures in the area are expected to be between 70 psi and 75 psi as depicted in Figure 4.

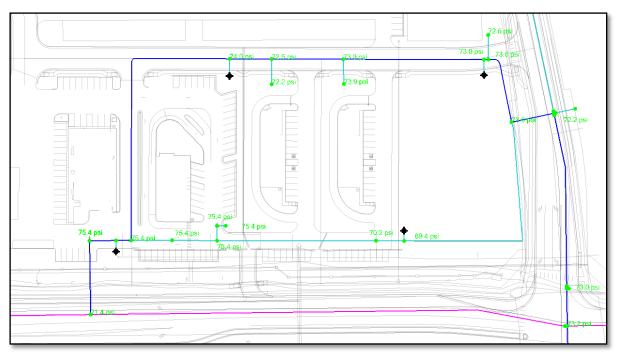


Figure 4. Service Pressures

FIRE FLOW

The demand of the system was set to maximum day demand or 0.47 gpm/SFE. Full buildout of the system was assumed with an approximate instantaneous max day demand of 23 MGD for the system and max day demand of 8 MGD for Pressure Zone 5. Fire flow constraints were set as follows:

- Fire Flow (Needed): 2,000 gpm
- Fire Flow (Upper Limit): 3,500 gpm
- Apply Fire Flow by: Adding to Baseline Demand
- Pressure (Residual Lower Limit): 20 psi
- Pressure (Zone Lower Limit): 20 psi
- Velocity (Upper Limit): 7.0 ft/s

Two fire flow scenarios were considered, one with all proposed pipes operational in the development and one with the 8" diameter pipeline on the southern portion of the development not yet constructed (set to inactive in the model). Both scenarios showed that adequate fire flow was available at all nodes.

The results from the model are included in figures 5 and 6 and tables 4 and 5.

RESPEC



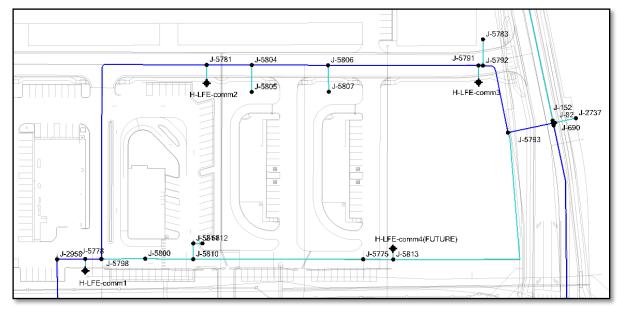


Figure 5. Piping Arrangement for Fire Flow Run, All Lines Active

Table 4. Re	sults for Fire	Flow Run with	All Line Active
	041100 101 1 11 0		=

Label	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)
H-LFE-comm1	3,050.40	3,050.40	62.9	22
H-LFE-comm2	3,500.00	3,500.00	56.9	20.6
H-LFE-comm3	3,500.00	3,500.00	56.1	20.5
H-LFE-comm4(FUTURE)	3,500.00	3,500.00	44	20.6
J-5775	3,500.00	3,501.80	46	20.6
J-5778	3,050.40	3,055.30	64.3	22
J-5781	3,500.00	3,500.00	59.3	20.6
J-5783	3,500.00	3,501.80	54.5	20.5
J-5791	3,500.00	3,500.00	58.8	20.5
J-5792	3,500.00	3,500.00	58.8	20.5
J-5793	3,500.00	3,500.00	59.3	20.5
J-5798	3,170.10	3,170.10	63.7	21.6
J-5800	3,491.20	3,491.20	58.3	20.6
J-5804	3,500.00	3,500.00	57.8	20.5
J-5805	3,500.00	3,503.80	53.5	20.5
J-5806	3,500.00	3,500.00	59.3	20.5
J-5807	3,500.00	3,501.90	55.3	20.5
J-5810	3,500.00	3,500.00	55.3	20.6
J-5811	3,500.00	3,500.00	52.8	20.6
J-5812	3,500.00	3,502.70	51.4	20.6
J-5813	3,500.00	3,500.00	45.3	20.6

RESPEC

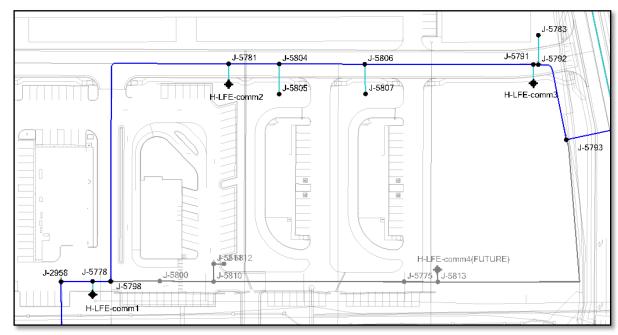


Figure 6. Piping Arrangement for Fire Flow Run, 8-inch Diameter Line Inactive

Label	Fire Flow (Available) (gpm)	Flow (Total Available) (gpm)	Pressure (Calculated Residual) (psi)	Pressure (Calculated Zone Lower Limit) (psi)
J-5778	2,946.20	2,951.10	63.9	21.8
J-5781	3,500.00	3,500.00	68	31.8
J-5783	3,500.00	3,501.80	62.9	31.8
J-5791	3,500.00	3,500.00	67.2	31.8
J-5792	3,500.00	3,500.00	67.2	31.8
J-5793	3,500.00	3,500.00	67.6	31.8
H-LFE-comm1	2,946.40	2,946.40	62.6	21.8
H-LFE-comm2	3,500.00	3,500.00	65.5	31.8
H-LFE-comm3	3,500.00	3,500.00	64.5	31.8
J-5798	3,040.20	3,040.20	63.4	21.5
J-5804	3,500.00	3,500.00	66.4	31.8
J-5805	3,500.00	3,503.80	62.1	31.8
J-5806	3,500.00	3,500.00	67.9	31.8
J-5807	3,500.00	3,501.90	63.9	31.8



8495 Fontaine Boulevard, Colorado Springs, Colorado 80925

April 4, 2024

Jeff Mark Landhuis Company 212 North Wahsatch, Suite 301 Colorado Springs, Colorado 80903

Cole Emmons County Attorney's Office 27 East Vermijo Avenue Colorado Springs, Colorado 80903

Re: Commitment Letter for "The Village at Lorson Ranch Filing No 1"

Dear Jeff and Cole:

The Widefield Water and Sanitation District commits to providing water and sewer service to the above-mentioned subdivision per this letter.

The water commitment is for <u>6 Commercial Lots plus 0.57 Acres of irrigated</u> <u>landscape for 12.93 acre-feet annually.</u> The expected wastewater load is 7,585 gallons per day.

The Widefield Water and Sanitation District has more than adequate water supply and wastewater treatment capacity to provide services.

Sincerely,

Robert Bannister, District Engineer

C: Travis Jones, Director of Operations

APPENDIX B – 2023 WWSD ANNUAL WATER AND WASTEWATER REPORT

WIDEFIELD WSD 2023 Drinking Water Quality Report Covering Data For Calendar Year 2022

Public Water System ID: CO0121900

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 KEEAN LANGLEY at 719-654-0306 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.

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 naturallyoccurring 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 KEEAN LANGLEY at 719-654-0306. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at 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. The report is located under "Guidance: Source Water Assessment Reports". Search the table using our system name or ID, or by contacting KEEAN LANGLEY at 719-654-0306. 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

WIDEFIELD WSD, PWS ID: CO0121900

Our Water Sources

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
W4 WELL (Groundwater-Well)	
W2 WELL (Groundwater-Well)	
W3 WELL (Groundwater-Well)	
WELL C1 (Groundwater-Well)	
W7 WELL (Groundwater-Well)	
WELL E2 (Groundwater-Well)	EPA Abandoned Contaminated Sites, EPA Hazardous Waste
WELL C3 (Groundwater-Well)	Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic
WELL C36 (Groundwater-Well)	Release Inventory Sites, Permitted Wastewater Discharge Sites,
JHW2 WELL REDRILL (Groundwater-Well)	Aboveground, Underground and Leaking Storage Tank Sites,
JHW5R WELL (Groundwater-Well)	Solid Waste Sites, Existing/Abandoned Mine Sites, Concentrated
JHW4R WELL (Groundwater-Well)	Animal Feeding Operations, Other Facilities,
WELL C2 REDRILL (Groundwater-Well)	Commercial/Industrial/Transportation, High Intensity
PURCHASED FROM CO0121275 (Groundwater-Consecutive	Residential, Low Intensity Residential, Urban Recreational
Connection)	Grasses, Row Crops, Fallow, Pasture / Hay, Septic Systems,
W1 WELL (Groundwater-Well)	Road Miles
PURCHASED FROM CO0121775 (Surface Water-Consecutive	
Connection)	
PURCHASED FROM CO0121300 (Surface Water-Consecutive	
Connection)	

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 90th 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

WIDEFIELD WSD 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.

	-	Disinfectants Sampled in the Dis At least 95% of samples per period (mon sample size is less than 40 no more than Typical Sources: Water additive used	th or quarter) must be at a sample is below 0.2 ppr		om <u>OR</u>	
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	October, 2022	<u>Lowest period</u> percentage of samples meeting TT requirement: 96%	1	25	No	4.0 ppm

		Lead a	nd Copper	Sampled in	the Distribu	ition Systen	1	
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources
Copper	09/15/2022 to 12/14/2022	0.88	62	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	02/01/2022 to 06/05/2022	8.1	61	ррb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	02/01/2022 to 06/05/2022	0.82	61	ppm	1.3	1	No	Corrosion of household plumbing systems; Erosion of natural deposits

		Lead a	nd Copper	Sampled in	the Distribu	ition System	1	
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources
Lead	09/15/2022 to 12/14/2022	5.8	62	ppb	15	4	No	Corrosion of household plumbing systems; Erosion of natural deposits

	Disinfection Byproducts Sampled in the Distribution System									
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources	
Total Haloacetic Acids (HAA5)	2022	7.85	1.2 to 18	16	ррb	60	N/A	No	Byproduct of drinking water disinfection	
Total Trihalome thanes (TTHM)	2022	19.03	3 to 43.6	16	ррb	80	N/A	No	Byproduct of drinking water disinfection	

	Radionuclides 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
Combined Uranium	2021	10.3	10.3 to 10.3	1	ppb	30	0	No	Erosion of natural deposits

		2	ontaminants San	-	•			•	
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2022	0.05	0.01 to 0.08	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2022	1.2	0 to 2.4	2	ррb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2022	0.96	0.96 to 0.96	1	ppm	4	4	No	Erosion of natura deposits; water additive which

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
									promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2022	5.02	3 to 6	11	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion o natural deposits
Selenium	2022	5.15	4.4 to 5.9	2	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natura deposits; discharg from mines

Volatile Organic 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	
Dichlorometha ne	2022	0.12	0 to 0.47	4	ррb	5	0	No	Discharge from pharmaceutical and chemical factories	
Tetrachloroethy lene	2022	0.57	0 to 1.7	10	ppb	5	0	No	Discharge from factories and dry cleaners	
Toluene	2022	0	0 to 0	4	ppm	1	1	No	Discharge from petroleum factories	

**Secondary st			Secondary Con ceable guidelines for conta or aesthetic effects (such as	minants that	may cause cosmeti	c effects (such as skin, or tooth g water.
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2022	129.5	39 to 220	2	ppm	N/A

Unregulated Contaminants***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
***More information about the	contamina	nts that were include	d in UCMR monitoring	can be found at: dr	inktap.org/Water-Info/Whats-
in-My-Water/Unregulated-Con	taminant-N	Ionitoring-Rule-UCM	IR. Learn more about the	e EPA UCMR at:	epa.gov/dwucmr/learn-about-
unregulated-contaminant-monit	oring-rule	or contact the Safe D	rinking Water Hotline at	(800) 426-4791 o	r <u>epa.gov/ground-water-</u>

and-drinking-water.

Violations, Significant Deficiencies, and Formal Enforcement Actions

Non-Health-Based Violations

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

Name	Description	Time Period		
SYNTHETIC ORGANICS	FAILURE TO MONITOR AND/OR	01/01/2020 - 12/31/2022		
	REPORT			
SYNTHETIC ORGANICS	FAILURE TO MONITOR AND/OR REPORT	01/01/2020 - 12/31/2022		
E. COLI	FAILURE TO MONITOR AND/OR REPORT	08/11/2022 - 08/15/2022		

Additional Violation Information

Synthetic Organics: Failure to monitor or timely report violation. Analyzing laboratory failed to provide timely sampled results within 10 days following the monitoring period ending December 31, 2021. The violation will be resolved upon completion of the 2023 regularly scheduled sampling. WWSD has implemented a more stringent tracking and communications plan with the laboratory to alleviate any future issues.

Synthetics Organics: Failure to monitor or timely report violation. There was a misinterpretation of a laboratory sampling bottle order for 4th quarter of 2022. Upon discovery of this violation, WWSD sampled missing analytes and all results complied with the Safe Drinking Water Act. The violation will be resolved upon completion of the 2023 regularly scheduled sampling. WWSD has implemented a more stringent tracking and communications plan with the laboratory to alleviate any future issues.

E COLI: Failure to monitor or timely report violation. A raw water sample from well JHW-2 was not provided to the State within the 24 hour requirement. District employees have received additional training to ensure no future reporting violations occur. This violation occurred on August 11, 2022, and was resolved on August 15, 2022.

These violations pose no risk to the health and safety of the community. No alternative water supply is needed.

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, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

For questions concerning this report, please contact Widefield Water and Sanitation District, 8495 Fontaine Blvd., Colorado Springs CO 80925 or call (719) 390-7111.

Public Water System ID: CO0121275

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 Fountain Utilities at 719-322-2072 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.

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 naturallyoccurring 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 Fountain Utilities at 719-322-2072. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at 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. The report is located under "Guidance: Source Water Assessment Reports". Search the table using our system name or ID, or by contacting Fountain Utilities at 719-322-2072. 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

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
GOLDFIELD CC - RECEIVED FROM WIDEFIELD (Surface Water-Consecutive Connection) PURCHASED FROM CO0121775 (Surface Water-Consecutive Connection) RICE LANE CC - RECEIVED FROM WIDEFIELD (Surface Water-Consecutive Connection) MESA RIDGE CC - RECEIVED FROM WIDEFIELD (Surface Water-Consecutive Connection) PURCHSD FROM CO0121300 FVA (Surface Water-Consecutive Connection) WELL NO 2 SOUTH PARK WELL (Groundwater-Well) WELL NO 3 SHOP WELL (Groundwater-Well) WELL NO 4 DALE ST (Groundwater-Well) PURCHSD FROM CO0121150 CSU (Surface Water- Consecutive Connection)	Aboveground, Underground and Leaking Storage Tank Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Pasture / Hay, 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 90th 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

FOUNTAIN CITY OF 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.

	Disinfectants Sampled in the Distribution System TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <u>OR</u> If sample size is less than 40 no more than 1 sample is below 0.2 ppm Typical Sources: Water additive used to control microbes								
Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL			
Chlorine	December, 2022	<u>Lowest period</u> percentage of samples meeting TT requirement: 100%	0	30	No	4.0 ppm			

		Lead a	nd Copper	Sampled in	the Distribu	ition System	1	
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources
Copper	10/19/2022 to 10/24/2022	0.46	60	ppm	1.3	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	05/04/2022 to 05/12/2022	3.1	60	ррb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	05/04/2022 to 05/12/2022	0.62	60	ppm	1.3	0	No	Corrosion of household plumbing

	Lead and Copper Sampled in the Distribution System											
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources				
								systems; Erosion of natural deposits				
Lead	10/19/2022 to 10/24/2022	3.4	60	ррb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits				

	Disinfection Byproducts Sampled in the Distribution System											
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources			
Total Haloacetic Acids (HAA5)	2022	20.91	8.6 to 29.7	16	ppb	60	N/A	No	Byproduct of drinking water disinfection			
Total Trihalome thanes (TTHM)	2022	44.53	18.1 to 63.7	16	ррb	80	N/A	No	Byproduct of drinking water disinfection			

	Radionuclides 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			
Gross Alpha	2020	2.38	0 to 3.9	3	pCi/L	15	0	No	Erosion of natural deposits			
Combined Radium	2020	1.54	1.27 to 1.8	2	pCi/L	5	0	No	Erosion of natural deposits			
Combined Uranium	2020	6.53	2.9 to 8.9	3	ррь	30	0	No	Erosion of natural deposits			

	Ι	norganic C	ontaminants Sar	npled at th	e Entry Poi	nt to the	Distributio	on System	
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2020	0.05	0.05 to 0.05	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2020	1.55	1.5 to 1.6	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2022	1.9	1.2 to 3.2	3	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2020	5.7	4.2 to 7.2	2	ррb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Secondary st	Secondary Contaminants **Secondary standards are <u>non-enforceable</u> 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	103.5	87 to 120	2	ppm	N/A				

Unregulated Contaminants***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
			Low mgn		
***More information about the in-My-Water/Unregulated-Cont					
unregulated-contaminant-monito					
and-drinking-water			6		<u> </u>

Violations, Significant Deficiencies, and Formal Enforcement Actions

Name	Description	Time Period
Gross Alpha	FAILURE TO MONITOR OR TIMELY	01/01/2023 - 03/31/2023
Combined Radium	REPORT	
Combined Uranium		
	Additional Violation Information	
ty of Fountain Violation. Analyzing	ab suffered equipment failure which caused failure to u	pload results by deadline. Fountain
÷	lanager from the lab and established more stringent com	
een submitted and the violation resolv	ed. For further information please contact Fountain Ut	ilities at 719-322-2072 with any

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, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.



Fountain Valley Authority (PWSID # CO0121300) 2023 Water Quality Report Information for: City of Fountain (PWSID # CO0121275) Colorado Springs Utilities (PWSID # CO0121150) Security Water District (PWSID # CO0121775) Stratmoor Hills Water District (PWSID # CO0121800) Widefield Water District (PWSID # CO0121900)

WATER SOURCE INFORMATION

Fountain Valley Authority treats surface water received from the Fryingpan-Arkansas Project. The Fryingpan-Arkansas Project is a system of pipes and tunnels that collects water in the Hunter-Fryingpan Wilderness Area near Aspen. Waters collected from the system are diverted to the Arkansas River, near Buena Vista, and then flows approximately 150 miles downstream to Pueblo Reservoir. From Pueblo Reservoir, the water travels through a pipeline to the water treatment plant.

At the end of 2022, Fountain Valley Authority Water Treatment Plant went offline for maintenance. The Fountain Valley Authority system was fed treated water from the Colorado Springs Utilities system. Much of Colorado Springs Utilities raw water collection system originates from nearly 200 miles away, near Aspen, Leadville, and Breckenridge. Almost 75 percent of our water originates from mountain streams. Water from these streams is collected and stored in numerous reservoirs along the Continental Divide. Collection systems in this area consist of the Homestake, Fryingpan-Arkansas, Twin Lakes, and Blue River systems and stored locally in nearby reservoirs.

Colorado Springs Utilities is able to divert water from local surface water collection systems including:

- North and South Slopes of Pikes Peak Catamount Reservoirs, Crystal Reservoir, South Slope Reservoirs, and tributaries
- North and South Cheyenne Creeks
- Fountain Creek
- Monument Creek Pikeview Reservoir
- Northfield Watershed Rampart and Northfield Reservoirs
- Pueblo Reservoir

COLORADO SOURCE WATER ASSESSMENT AND PROTECTION

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 <u>https://www.colorado.gov/cdphe/ccr.</u> The report is located under "Guidance: Source Water Assessment Reports". Search the table using 121300, FOUNTAIN VALLEY AUTHORITY or by contacting Colorado Springs Utilities Laboratory Services at 719-668-4560. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that <u>could</u> occur. It <u>does not</u> mean that the contamination <u>has or will</u> 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 below.

Potential sources of contamination to our source water areas may come from:

- EPA Superfund Sites
- EPA Abandoned Contaminated Sites
- EPA Hazardous Waste Generators
- EPA Chemical Inventory/Storage Sites
- EPA Toxic Release Inventory Sites
- Permitted Wastewater Discharge Sites
- Aboveground, Underground and Leaking Storage Tank Sites
- Solid Waste Sites
- Existing/Abandoned Mine Sites
- Concentrated Animal Feeding Operations
- Other Facilities
- Commercial/Industrial Transportation
- High-and-Low-Intensity Residential
- Urban Recreational Grasses
- Quarries/Strip Mines/Gravel Pits
- Agricultural Land (row crops, small grain, pasture/hay, orchards/vineyards, fallow and other)
- Forest
- Septic Systems
- Oil/Gas Wells
- Road Miles

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.

POSSIBLE WATER CONTAMINANTS

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 https://www.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.

FLUORIDE INFORMATION

Fluoride is a compound found naturally in many places, including soil, food, plants, animals, and the human body. It is also found naturally in Fountain Valley Authority's water source. Fountain Valley Authority does not add additional fluoride to the treated water. Any fluoride in the treated water results from what occurs naturally in the source water.

LEAD INFORMATION

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater/lead.

DEFINITIONS

- 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 90th 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.

TABLE OF DETECTED CONTAMINANTS

Fountain Valley Authority and Colorado Springs Utilities routinely monitor 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.

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.

Detected Contaminants Table Fountain Valley Authority (PWSID CO0121300) Colorado Springs Utilities (PWSID CO0121150)

				Mor	nitored at the	Treatment P	lant	
Contaminant	MCL	MCLG	Units	Range Detected	Average Detected	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Barium	2	2	ppm	0.013 - 0.054	0.03	No	July 2022	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	100	100	ppb	0 - 1.50	0.47	No	July 2022	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	4	4	ppm	0.14 - 1.46	0.50	No	July 2022	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen)	10	10	ppm	0-0.4	0.12	No	July 2022	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	50	50	ppb	0 - 3.50	0.58	No	July 2022	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N/A	N/A	ppm	0.01 - 0.02	0.01	No	July 2022	Erosion of natural deposits

Inorganic Contaminants

Turbidity Continuously monitored at the Treatment Plant

Contaminant	TT Requirement	Level Detected	π	Sample Dates	Possible Source(s) of Contamination
			Violation		
Turbidity	Maximum 1 NTU for any single measurement	Highest Single Measurement: 0.33 NTU, May	No	Jan – Dec 2022	Soil Runoff
Turbidity	In any month, at least 95% of samples must be less than 0.3NTU	Lowest Monthly percentage of samples meeting TT requirement: 100%, December	No	Jan -Dec 2022	Soil Runoff

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water Monitored at the Treatment Plant

Contaminant	MCL	MCLG	Units	Range	Average	MCL	Sample Dates	Possible Source(s) of Contamination
Total Organic Carbon	TT minimum	N/A	N/A	Low - High 1 – 2.06	1.30	Violation No	Monthly - Running	Naturally present in the environment
(TOC)	ratio = 1.00						Annual Average	

Disinfectants Monitored at the Treatment Plant

Contaminant	MRDL/TT	Lowest TT Percentage	Number of samples below 0.2	Units	TT Violation	Sample Dates	Possible Source(s) of Contamination
Chlorine	MRDL = 4 ppm TT= At least 95% of samples per month must be at least 0.2ppm	100% December	0	ppm	No	2022	Drinking water disinfectant used to control microbes

Radionuclides Monitored at the Treatment Plant

Contaminant	MCL	MCLG	Units	Range Detected	Average Detected	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Combined Radium	5	0	pCi/L	0-1.9	1.1	No	June 2020	Erosion of natural deposits
Combined Uranium	30	0	ppb	0-4.0	0.7	No	June 2020	Erosion of natural deposits
Gross Alpha	15	0	pCi/L	0-1.02	0.49	No	June 2020	Erosion of natural deposits

WANT MORE INFORMATION

For questions concerning this report, please call Colorado Springs Utilities Laboratory Services at (719) 668-4560.



Colorado Springs Utilities (PWSID # CO0121150) 2023 Water Quality Report Information for:

Fort Carson Army Base (PWSID # CO0221445) Peterson Air Force Base Tierra Vista Communities Cheyenne Mountain Air Force Station (PWSID # CO0221205) Security Water and Sanitation District (PWSID # CO0121775) Cherokee Water District (PWSID # CO0121125)

Water Sources

Your water is blended from multiple sources, including surface water and purchased water. Your water source may vary throughout the year.

Mountain Water Sources

With no major water source nearby, much of Colorado Springs Utilities raw water collection system originates from nearly 200 miles away, near Aspen, Leadville, and Breckenridge. Almost 75 percent of our water originates from mountain streams. Water from these streams is collected and stored in numerous reservoirs along the Continental Divide. Collection systems in this area consist of the Homestake, Fryingpan-Arkansas, Twin Lakes, and Blue River systems.

The majority of this raw water is transferred to our city through pipelines that help protect it from contamination, such as herbicides, pesticides, heavy metals and other chemicals. After the long journey, water is stored locally at Rampart Reservoir and the Catamount reservoirs on Pikes Peak.

Local Surface Sources

To supplement the water received from the mountain sources, Colorado Springs Utilities is able to divert water from local surface water collection systems including:

- North and South Slopes of Pikes Peak Catamount Reservoirs, Crystal Reservoir, South Slope Reservoirs and tributaries
- North and South Cheyenne Creeks
- Fountain Creek
- Monument Creek Pikeview Reservoir
- Northfield Watershed Rampart and Northfield Reservoirs
- Pueblo Reservoir

Purchased Water Source

Fountain Valley Authority or FVA (PWSID#CO0121300) receives water from the Fryingpan-Arkansas Project – a system of pipes and tunnels that collects water in the Hunter- Fryingpan Wilderness Area near Aspen. Waters collected from this system are diverted to the Arkansas River, near Buena Vista, and then flow about 150 miles downstream to Pueblo Reservoir. From there, the water travels through a pipeline to a water treatment plant before being delivered to Colorado Springs.

All water sources are treated at one of our treatment plants (or in the case of FVA water at FVA's treatment plant) prior to entering our drinking water distribution system; an intricate system of tanks, pumps and pipes that ultimately deliver water to your home or business.

Colorado Source Water Assessment and Protection

The Colorado Department of Public Health and Environment has 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 https://www.colorado.gov/cdphe/ccr. The report is located under "Guidance: Source Water Assessment Reports." Search the table using 121150, COLORADO SPRINGS UTILITIES, or by contacting Laboratory Services at 719-668-4560. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that <u>could</u> occur. It <u>does not</u> mean that the contamination <u>has or will</u> 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 below.

Potential sources of contamination to our source water areas may come from:

- EPA Superfund Sites
- EPA Abandoned Contaminated Sites
- EPA Hazardous Waste Generators
- EPA Chemical Inventory/Storage Sites
- EPA Toxic Release Inventory Sites
- Permitted Wastewater Discharge Sites
- Aboveground, Underground and Leaking Storage Tank Sites
- Solid Waste Sites
- Existing/Abandoned Mine Sites
- Concentrated Animal Feeding Operations
- Other Facilities
- Commercial/Industrial Transportation
- High-and-Low-Intensity Residential
- Urban Recreational Grasses
- Quarries/Strip Mines/Gravel Pits
- Agricultural Land (row crops, small grain, pasture/hay, orchards/vineyards, fallow and other)
- Forest
- Septic Systems
- Oil/Gas Wells
- Road Miles

The results of the source water assessment are not a reflection of our treated water quality or the water you receive, but rather a rating of the susceptibility of source water contamination under the guidelines of the Colorado SWAP program.

General Information

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:

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 operation 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 that 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 also may come from gas stations, urban stormwater runoff, and septic systems.

• Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

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.

Immunocompromised Persons Advisory

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 https://www.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).

Information About Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

Information about Fluoride

Fluoride is a compound found naturally in many places, including soil, food, plants, animals and the human body. It is also found naturally at varying levels in all Colorado Springs' water sources. Colorado Springs Utilities does not add additional fluoride to your drinking water. Any fluoride in the drinking water comes naturally from our source waters.

Information about PFAS

PFAS are a man-made chemical present in food packaging, commercial house-hold products, drinking water sources and manufacturing facilities. Currently, PFAS are not regulated under the National Primary Drinking Water Regulations. However, Colorado Springs Utilities tested for 18 PFAS compounds and none of these compounds were detected above the reporting limit of 1.9 parts per trillion at our water treatment facilities in 2022.For more information about PFAS click https://www.epa.gov/pfas.

Terms, Abbreviations & Symbols

- 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 90th 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.

Data Presented in the Water Quality Report

Colorado Springs Utilities routinely monitors for contaminants in your drinking water according to Federal and State laws. The table on the following pages shows the combined results of our monitoring for six water treatment plants, including purchased water from Fountain Valley Authority, for the period of January 1 through December 31, 2022, unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per your because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system in not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than a year old.

Only detected contaminants sampled within the last 5 years appear in this report. If no table appears in this section, then no contaminants were detected in the last round of monitoring.

				Colorado S	prings Utilitie	es (PWSID CO	0121150)				
	Inorganic Contaminants										
Monitored at the Treatment Plant (entry point to the distribution system)											
Contaminant	MCL	MCLG	Units	Range Detected	Average Detected	MCL Violation	Sample Dates	Possible Source(s) of Contamination			
Barium	2	2	ppm	0.013 - 0.054	0.03	No	July 2022	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Chromium	0.1	0.1	ppm	0-1.50	0.47	No	July 2022	Discharge from steel and pulp mills; Erosion of natural deposits.			
Fluoride	4	4	ppm	0.14 - 1.46	0.50	No	July 2022	Erosion of natural deposits; discharge from fertilizer and aluminum factories			
Nitrate (as Nitrogen)	10	10	ppm	0-0.4	0.12	No	July 2022	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits			
Selenium	50	50	ppb	0 - 3.50	0.58	No	July 2022	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines			
Sodium	N/A	N/A	ppm	0.01 - 0.02	0.01	No	July 2022	Erosion of natural deposits			

Detected Contaminants Tables

					Radionuclide	es		
		Mor	nitored at	the Treatment	: Plant (entry p	oint to the distr	ibution system)	
Contaminant	MCL	MCLG	Units	Range	Average	MCL	Sample Dates	Possible Source(s) of Contamination
						Violation		
Combined Radium	5	0	pCi/L	0-1.9	1.1	No	June 2020	Erosion of natural deposits
Combined Uranium	30	0	ppb	0 - 4.0	0.7	No	June 2020	Erosion of natural deposits
Gross Alpha	15	0	pCi/L	0-1.02	0.49	No	June 2020	Erosion of natural deposits

					organic cor	i cumunos		
			Monitor	ed at the Treat	ment Plant (e	ntry point to	the distribution syst	tem)
Contaminant	MCL	MCLG	Units	Range Detected	Average Detected	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Di(2-ethylhexyl) phthalate	50	0	ppb	0-1.6	0.2	No	January, March, April, July, October 2022	Discharge from rubber and chemical factories
Xylenes	10,000	10,000	ppb	0-1.6	0.3	No	January, April, July, October 2022	Discharge from petroleum factories; discharge from chemical factories

Organic Contaminants

Turbidity Continuously monitored at the Treatment Plant (entry point to the distribution system)

Contaminant	TT Requirement	Level Detected	TT Violation	Sample Dates	Possible Source(s) of Contamination
Turbidity	Maximum 1 NTU for any single measurement	Highest Single Measurement: 0.33 NTU, May	No	Jan – Dec 2022	Soil Runoff
Turbidity	In any month, at least 95% of samples must be less than 0.3NTU	Lowest Monthly percentage of samples meeting TT requirement: 100%, December	No	Jan -Dec 2022	Soil Runoff

Disinfectants

	Continuously monitored at the Treatment Plant (entry point to the distribution system)										
Contaminant	MRDL/ TT Requirement	Units	Level	MRDL/TT	Sample Dates	Possible Source(s) of Contamination					
			Detected	Violation							
Chlorine	TT= No more than 4 hours with a sample below 0.2 ppm	ppm	0 samples above or below the level	No	Jan – Dec 2022	Water additive used to control microbes					

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water

Monitored at the Treatment Plant (entry point to the distribution system)

Contaminant	MCL	MCLG	Units	Range Low - High	Average	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Total Organic Carbon (TOC)	TT minimum ratio = 1.00	N/A	N/A	1 – 2.06	1.30	No	Monthly - Running Annual Average	Naturally present in the environment

Disinfection Byproducts Monitored in the distribution system

Contaminant	MCL	MCLG	Units	Range detected of individual sites	Average detected of individual sites	Highest Compliance Value	MCL Violation	Sample Dates	Possible Source(s) of Contamination
Total Haloacetic Acids (HAA5)	60	N/A	ppb	11.4 - 44.1	27.5	42.3	No	Jan, Apr, Jul, Oct 2022	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	80	N/A	ppb	20.0 - 58.1	36.6	47.0	No	Jan, Apr, Jul, Oct 2022	Byproduct of drinking water disinfection
				Disi	nfectants in th	ne Distribution	System		
Contaminant	I	MRDL/TT		Lowest TT Percentage	Number of samples below 0.2	f Units	TT Violation	Sample Date	es Possible Source(s) of Contamination
Chlorine	TT= At lea per mont	RDL = 4 pp ist 95% of h must be 0.2ppm	samples	100% December	0	ppm	No	2022	Drinking water disinfectant used to control microbes
				М		Ind Copper e distribution s	ystem		
Contaminant	AL at the 90 th Percentile	MCLG	Units	90 th Percentile	e Sample Size	Sample Sites Above AL	AL Exceedance	Sample Dates	Possible Source(s) of Contamination
Copper	1.3	1.3	ppm	0.18	73	0	No	2021 e	Corrosion of household plumbing systems; prosion of natural deposits; leaching from wood preservatives
Lead	15	0	ppb	6.8	73	2	No	•	Corrosion of household plumbing systems; prosion of natural deposits

Unregulated Contaminant Monitoring Regulation (UCMR)

The 1996 amendments to the Safe Drinking Water Act required that EPA establish criteria for a program to monitor unregulated contaminants and to identify no more than 30 unregulated contaminants to be monitored every five years.

Unregulated contaminants are those contaminants that do not have a drinking water standard (maximum contaminate level) established by EPA. The purpose of the UCMR is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

The fourth round of the UCMR required monitoring for 30 contaminants. Colorado Springs Utilities was required to monitoring for these contaminants starting in January 2018. The results for any contaminants detected thus far are listed below. For further information on UCMR please visit https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule

Monitored at the Treatment Plant (entry point to the distribution system)

Contaminant	Average Level Detected	Range	Units	Sample Dates	Potential Sources of Contamination
Manganese		0 - 11	ppb	Jan, Apr, Jul, Oct 2018	Naturally occurring element, commercially available in combination with other elements and minerals, a byproduct of zinc ore processing, used in infrared optics, fiber optic systems electronics and solar applications
1-Butanol	1.07	0-13	ppb	Jan, Mar, Apr, Jul, Oct 2018	Used as a solvent, food additive, and in the production of other chemicals
Quinoline	0.001	0-0.0318	ррb	Jan, Mar, Apr, Jul, Oct 2018 Feb, Mar 2019	Used as a pharmaceutical and flavoring agent, produced as a chemical intermediate, component of coal

Monitored in the Distribution System Contaminant **Potential Sources of Contamination** Average Range Units Sample Dates Level Detected Haloacetic Acids 5 (HAA5) 33.9 10.2 - 55.0 Jan, Apr, Jul, Oct 2018 Byproduct of drinking water disinfection ppb Brominated Haloacetic Acids 6 0.79 - 9.103.18 ppb Jan, Apr, Jul, Oct 2018 Byproduct of drinking water disinfection (HAABr6) Haloacetic Acids 9 (HAA9) 36.4 14.5 - 57.0 Jan, Apr, Jul, Oct 2018 Byproduct of drinking water disinfection ppb

Customers Have a Voice in Decisions

We encourage customer participation in decisions affecting our drinking water.

- Utilities Board our governing body meets the Wednesday between City Council meetings, 1 p.m. at the Plaza of the Rockies, South Tower, 121 S. Tejon St., Fifth floor.
- Call 719-668-4800 or click <u>Utilities Board (csu.org)</u> for information.

General Information

To request a printed copy of this report or for questions call 719-668-4560. For more water quality information or to access past Drinking Water Quality Reports click <u>Water Quality Report (csu.org)</u>.

SECURITY WATER DISTRICT 2023 Drinking Water Quality Report Covering Data For Calendar Year 2022

Public Water System ID: CO0121775

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 RICHARD DAVIS at 719-392-3475 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.

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 naturallyoccurring 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 RICHARD DAVIS at 719-392-3475. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at 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. The report is located under "Guidance: Source Water Assessment Reports". Search the table using our system name or ID, or by contacting RICHARD DAVIS at 719-392-3475. 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

SECURITY WATER DISTRICT, PWS ID: CO0121775

quality water we deliver to you every day.

Our Water Sources

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
V4 WELL (Groundwater-Well)	
V5 WELL (Groundwater-Well)	
V7 WELL (Groundwater-Well)	
V8 WELL (Groundwater-Well)	
W12 WELL (Groundwater-Well)	
W8 WELL (Groundwater-Well)	
W9 WELL (Groundwater-Well)	
S12 WELL (Groundwater-Well)	
PURCHASED FROM CO0121300 (Surface Water-Consecutive	
Connection)	
CS WELL 13 (Groundwater-Well)	EPA Abandoned Contaminated Sites, EPA Hazardous Waste
PURCHASED FROM CO0121150 (Surface Water-Consecutive	Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic
Connection)	Release Inventory Sites, Aboveground, Underground and
S13 WELL (Groundwater-Well)	Leaking Storage Tank Sites, Solid Waste Sites,
S14 WELL (Groundwater-Well)	Existing/Abandoned Mine Sites, Other Facilities,
S15 WELL (Groundwater-Well)	Commercial/Industrial/Transportation, High Intensity
S16 WELL (Groundwater-Well)	Residential, Low Intensity Residential, Urban Recreational
S17 WELL (Groundwater-Well)	Grasses, Row Crops, Pasture / Hay, Deciduous Forest, Septic
FV4 WELL (Groundwater-Well)	Systems, Road Miles
S8 WELL (Groundwater-Well)	
REAM WELL NO 1 R-1 (Groundwater-Well)	
REAM WELL NO 2 R-2 (Groundwater-Well)	
S2 WELL (Groundwater-Well)	
S4 WELL (Groundwater-Well)	
S7 WELL (Groundwater-Well)	
S9 WELL (Groundwater-Well)	
S10 WELL (Groundwater-Well)	
S11 WELL (Groundwater-Well)	

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 90th 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

SECURITY WATER DISTRICT 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.

	Disinfectants Sampled in the Distribution System TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <u>OR</u> If sample size is less than 40 no more than 1 sample is below 0.2 ppm Typical Sources: 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	20	No	4.0 ppm			

	Lead and Copper Sampled in the Distribution System									
Contaminant	Time	90 th	Sample	Unit of	90 th	Sample	90 th	Typical Sources		
Name	Period	Percentile	Size	Measure	Percentile	Sites	Percentile			
					AL	Above	AL			
						AL	Exceedance			
Copper	01/05/2022	0.93	60	ppm	1.3	0	No	Corrosion of		
	to							household plumbing		
								systems; Erosion of		

	Lead and Copper Sampled in the Distribution System									
Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources		
	03/31/2022							natural deposits		
Lead	07/26/2022 to 10/02/2022	2.7	60	ррЬ	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Copper	07/26/2022 to 10/02/2022	0.97	60	ppm	1.3	1	No	Corrosion of household plumbing systems; Erosion of natural deposits		
Lead	01/05/2022 to 03/31/2022	2.1	60	ррb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits		

Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2022	6.71	0 to 25	16	ррb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalome thanes (TTHM)	2022	17.07	2.6 to 55.02	16	ррb	80	N/A	No	Byproduct of drinking water disinfection

	Radionuclides 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	
Gross Alpha	2021	3.9	3.9 to 3.9	1	pCi/L	15	0	No	Erosion of natural deposits	

	Radionuclides 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	
Combined Radium	2021	2.05	2.05 to 2.05	1	pCi/L	5	0	No	Erosion of natural deposits	

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2021	0.09	0.09 to 0.09	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2022	0.53	0.53 to 0.53	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2022	5.67	5.3 to 6	4	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion o natural deposits

Secondary st	Secondary Contaminants **Secondary standards are <u>non-enforceable</u> 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								
Sodium	2021 36 36 to 36 1 ppm N/A							

Unregulated Contaminants***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
***More information about th	e contamina	nts that were include	d in UCMR monitoring	can be found at: dr	inktap.org/Water-Info/Whats-
in-My-Water/Unregulated-Con	ntaminant-M	Ionitoring-Rule-UCN	<u>IR</u> . Learn more about the	e EPA UCMR at:	epa.gov/dwucmr/learn-about-
unregulated-contaminant-mon	itoring-rule	or contact the Safe D	rinking Water Hotline a	t (800) 426-4791 o	r <u>epa.gov/ground-water-</u>
and-drinking-water.					

Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions