

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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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.

The new water commitments are 12.93 ac-ft per year for the 6 lots and the landscaping. See Table 3 in the technical memorandum by Respec Engineering for more details.

3.0 SUMMARY AND CONCLUSIONS

The maximum allowable water demand are as follows:

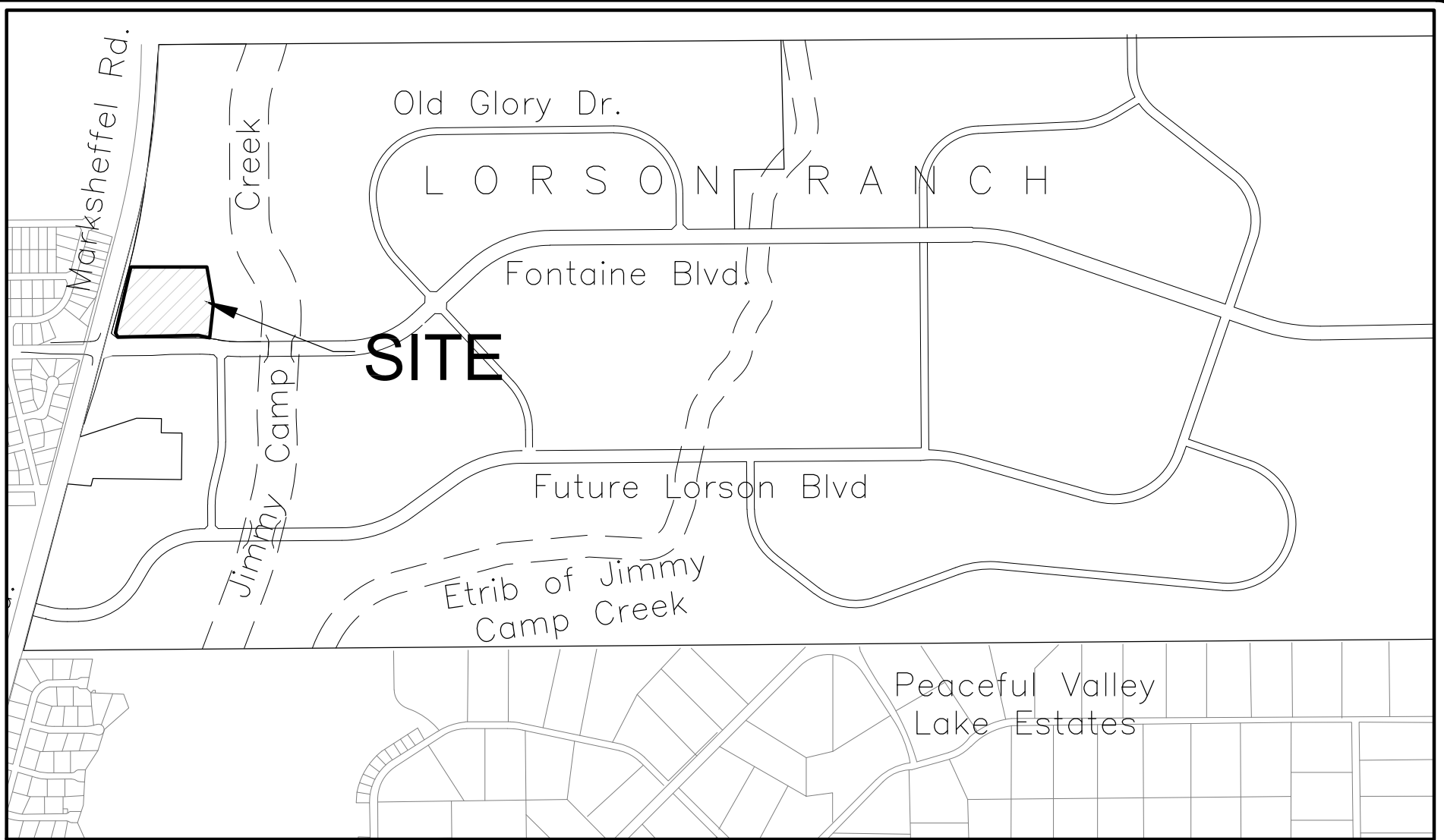
Item	ac. ft./yr	Avg. Daily Flow (gpd)
Water Demand	12.93	11,536

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**



VICINITY MAP

NO SCALE



CORE
ENGINEERING GROUP

15004 1ST AVE. S.
BURNSVILLE, MN 55306
PH: 719.659-7800

CONTACT: RICHARD L. SCHINDLER, P.E.
EMAIL: Rich@ceg1.com

VILLAGE AT LORSON RANCH FIL. NO. 1
VICINITY MAP

SCALE:
NTS

DATE:
APRIL, 2024

FIGURE NO.
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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 PROPOSED VILLAGE AT LORSON RANCH FILING NO. 1			
2. LAND USE ACTION SF			
3. NAME OF EXISTING PARCEL AS RECORDED			
SUBDIVISION	FILING	BLOCK	LOT
4. TOTAL ACREAGE 9.725	5. NUMBER OF LOTS PROPOSED 6	PLAT MAP ENCLOSED <input type="checkbox"/> YES	
6. PARCEL HISTORY - Please attach copies of deeds, plats or other evidence or documentation.			
A. Was parcel recorded with county prior to June 1, 1972? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			
B. Has the parcel ever been part of a division of land action since June 1, 1972? <input type="checkbox"/> YES <input type="checkbox"/> NO			
If yes, describe the previous action _____			
7. LOCATION OF PARCEL - Include a map delineating the project area and tie to a section corner.			
SE 1/4 OF SECTION 15 _____ 1/4 OF _____ 1/4 SECTION _____ TOWNSHIP 15 <input type="checkbox"/> N <input checked="" type="checkbox"/> S RANGE 65 <input type="checkbox"/> E <input checked="" type="checkbox"/> W			
PRINCIPAL MERIDIAN: <input checked="" type="checkbox"/> 6TH <input type="checkbox"/> N.M. <input type="checkbox"/> UTE <input type="checkbox"/> COSTILLA			
8. PLAT - Location of all wells on property must be plotted and permit numbers provided. Surveyors plat <input type="checkbox"/> Yes <input type="checkbox"/> No If not, scaled hand drawn sketch <input type="checkbox"/> Yes <input type="checkbox"/> No			
9. ESTIMATED WATER REQUIREMENTS - Gallons per Day or Acre Feet per Year		10. WATER SUPPLY SOURCE	
HOUSEHOLD USE # _____ of units _____ GPD _____ AF		<input type="checkbox"/> EXISTING WELLS <input type="checkbox"/> DEVELOPED SPRING WELL PERMIT NUMBERS _____ _____ _____ <input type="checkbox"/> MUNICIPAL <input type="checkbox"/> ASSOCIATION <input type="checkbox"/> COMPANY <input checked="" type="checkbox"/> DISTRICT NAME <u>WIDEFIELD W & S</u> LETTER OF COMMITMENT FOR SERVICE <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> NEW WELLS - PROPOSED AQUIFERS - (CHECK ONE) <input type="checkbox"/> ALLUVIAL <input type="checkbox"/> UPPER ARAPAHOE <input type="checkbox"/> UPPER DAWSON <input type="checkbox"/> LOWER ARAPAHOE <input type="checkbox"/> LOWER DAWSON <input type="checkbox"/> LARAMIE FOX HILLS <input type="checkbox"/> DENVER <input type="checkbox"/> DAKOTA <input type="checkbox"/> OTHER _____
COMMERCIAL USE # <u>6 LOTS</u> of S.F. <u>8,074</u> GPD <u>9.05</u> AF			
IRRIGATION # <u>0.57</u> of acres <u>3,462</u> GPD <u>3.88</u> AF			
STOCK WATERING # _____ of head _____ GPD _____ AF			
OTHER _____ GPD _____ AF			
TOTAL <u>11,536</u> GPD <u>12.93</u> AF		WATER COURT DECREE CASE NO.'S _____ _____ _____	
11. ENGINEER'S WATER SUPPLY REPORT <input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, PLEASE FORWARD WITH THIS FORM. (This may be required before our review is completed.)			
12. TYPE OF SEWAGE DISPOSAL SYSTEM			
<input type="checkbox"/> SEPTIC TANK/LEACH FIELD		<input checked="" type="checkbox"/> CENTRAL SYSTEM - DISTRICT NAME <u>WIDEFIELD W & S DISTRICT</u>	
<input type="checkbox"/> LAGOON		<input type="checkbox"/> VAULT - LOCATION SEWAGE HAULED TO _____	
<input type="checkbox"/> ENGINEERED SYSTEM (Attach a copy of engineering design)		<input type="checkbox"/> OTHER _____	



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

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.

Table 1: Planned Development

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

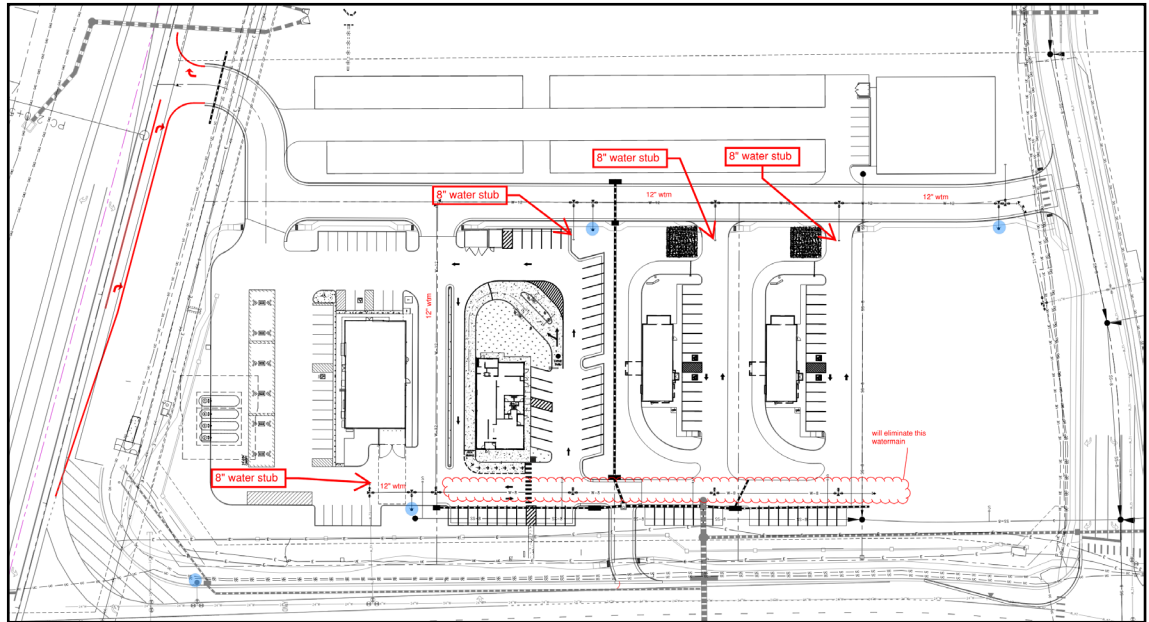


Figure 1: Development Layout

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.

Table 2: Fountain Commercial Water Metrics

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

Notes: 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.

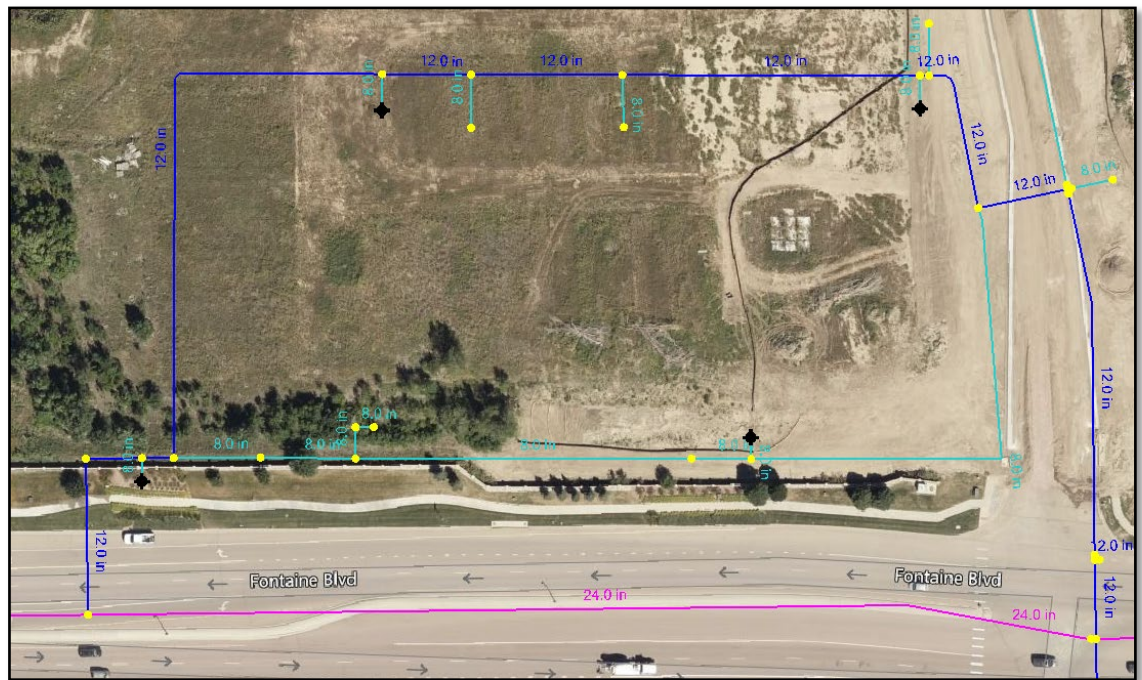


Figure 3. Piping Arrangement for Commercial Lots

PRESSURE

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

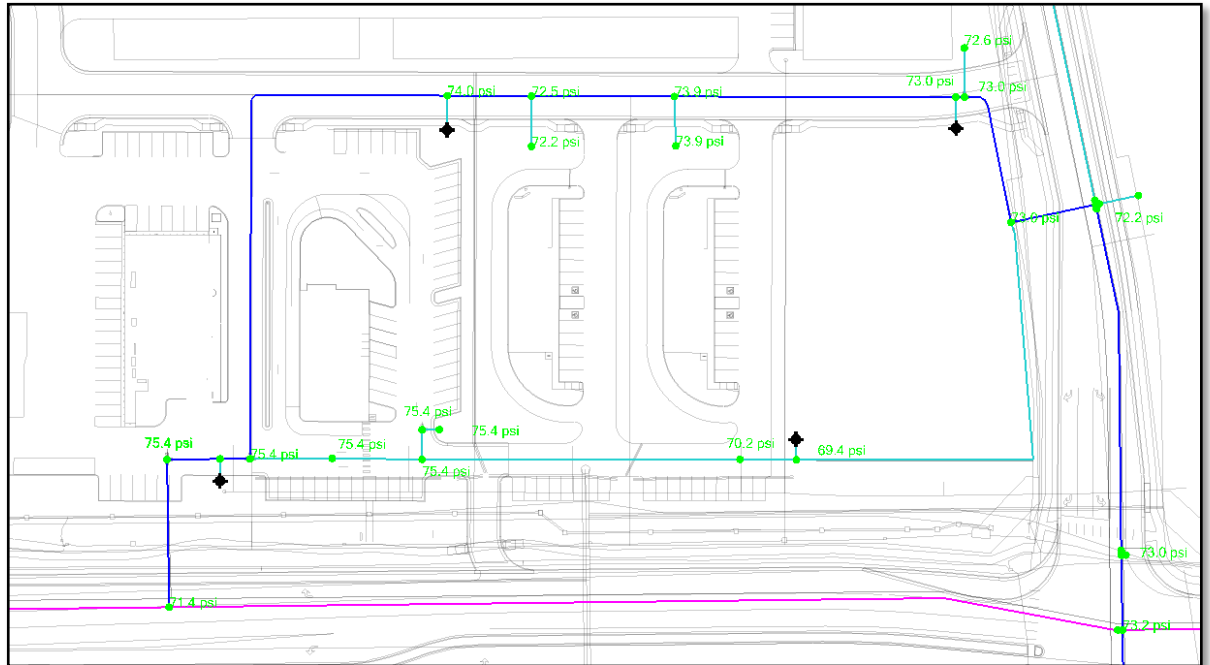


Figure 4. Service Pressures

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.

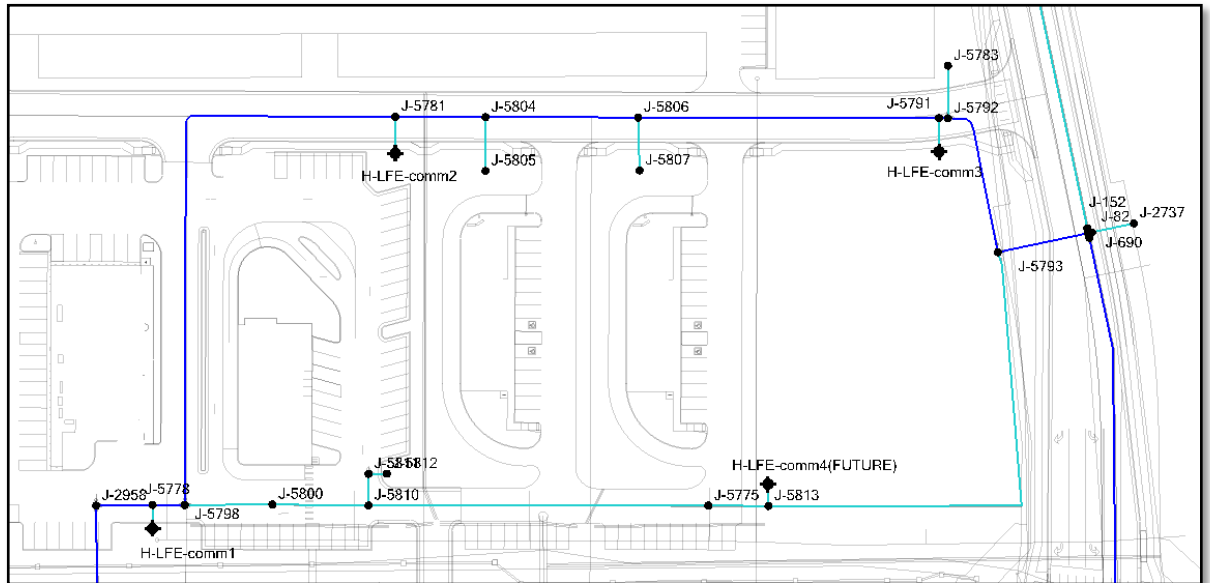


Figure 5. Piping Arrangement for Fire Flow Run, All Lines Active

Table 4. Results for Fire Flow Run with All Line Active

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

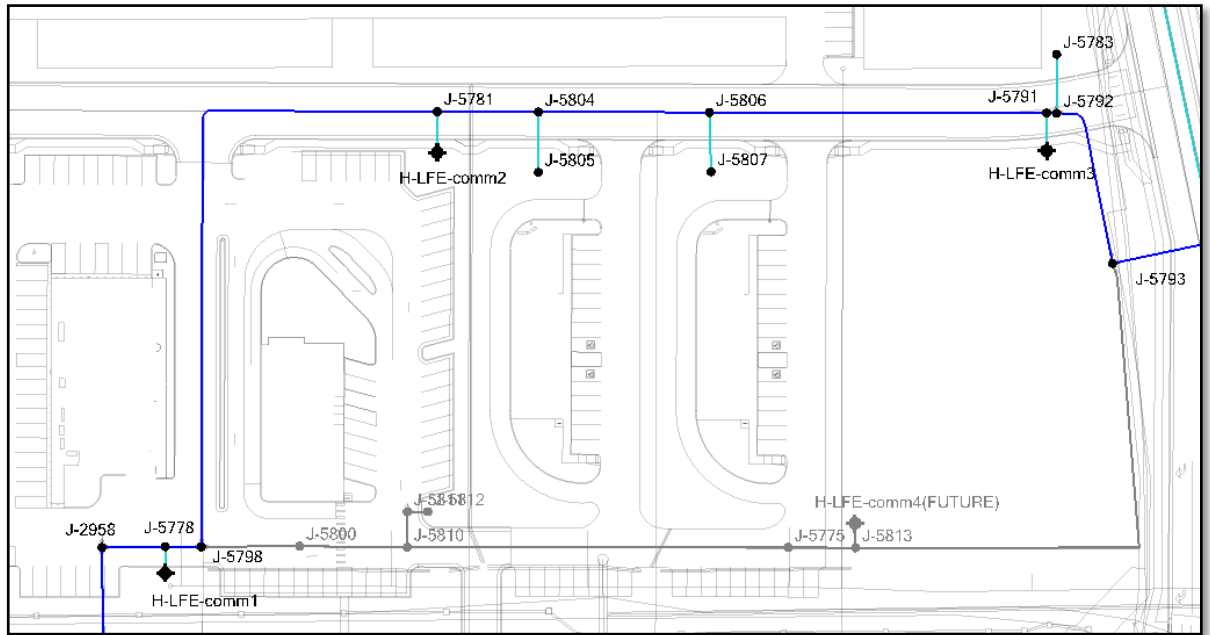


Figure 6. Piping Arrangement for Fire Flow Run, 8-inch Diameter Line Inactive

Table 5. Results for Fire Flow Run with 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 **6 Commercial Lots plus 0.57 Acres of irrigated landscape for 12.93 acre-feet annually.** 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,

A handwritten signature in blue ink that reads "Robert K. Bannister".

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 naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes

regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact 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

Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
<p>W4 WELL (Groundwater-Well) W2 WELL (Groundwater-Well) W3 WELL (Groundwater-Well) WELL C1 (Groundwater-Well) W7 WELL (Groundwater-Well) WELL E2 (Groundwater-Well) WELL C3 (Groundwater-Well) WELL C36 (Groundwater-Well) JHW2 WELL REDRILL (Groundwater-Well) JHW5R WELL (Groundwater-Well) JHW4R WELL (Groundwater-Well) WELL C2 REDRILL (Groundwater-Well) PURCHASED FROM CO0121275 (Groundwater-Consecutive Connection) W1 WELL (Groundwater-Well) PURCHASED FROM CO0121775 (Surface Water-Consecutive Connection) PURCHASED FROM CO0121300 (Surface Water-Consecutive Connection)</p>	<p>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 Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Pasture / Hay, Septic Systems, Road Miles</p>

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 Distribution System						
TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm <i>OR</i> 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	October, 2022	<u>Lowest period</u> percentage of samples meeting TT requirement: 96%	1	25	No	4.0 ppm

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
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	ppb	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 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
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	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2022	19.03	3 to 43.6	16	ppb	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

Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
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	ppb	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 natural deposits; water additive which

Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
									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 of natural deposits
Selenium	2022	5.15	4.4 to 5.9	2	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Nitrate: *Nitrate in drinking water at levels above 10 ppm* is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

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
Dichloromethane	2022	0.12	0 to 0.47	4	ppb	5	0	No	Discharge from pharmaceutical and chemical factories
Tetrachloroethylene	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 Contaminants**

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

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2022	129.5	39 to 220	2	ppm	N/A

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 REPORT	01/01/2020 - 12/31/2022
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.

FOUNTAIN CITY OF 2023 Drinking Water Quality Report

Covering Data For Calendar Year 2022

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 naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

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

Lead in Drinking Water

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact 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

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
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 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
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	ppb	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	ppb	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 Trihalomethanes (TTHM)	2022	44.53	18.1 to 63.7	16	ppb	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	ppb	30	0	No	Erosion of natural deposits

Inorganic Contaminants Sampled at the Entry Point to the Distribution System									
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
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	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

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

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 reported the sample result after the due date, or we did not complete a report/notice by the required date.

Name	Description	Time Period
Gross Alpha Combined Radium Combined Uranium	FAILURE TO MONITOR OR TIMELY REPORT	01/01/2023 - 03/31/2023

Additional Violation Information

City of Fountain Violation. Analyzing lab suffered equipment failure which caused failure to upload results by deadline. Fountain Utilities has acquired a new Account Manager from the lab and established more stringent communication requirements. Results have been submitted and the violation resolved. For further information please contact Fountain Utilities at 719-322-2072 with any questions.

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 <https://www.colorado.gov/cdphe/ccr>. 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 **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 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)

Inorganic Contaminants

Monitored at the Treatment Plant

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

Turbidity

Continuously monitored at the Treatment Plant

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

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

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

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 **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 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 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 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.

Detected Contaminants Tables

Colorado Springs Utilities (PWSID CO0121150)

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

Radionuclides

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

Contaminant	MCL	MCLG	Units	Range	Average	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

Organic 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
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

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 Detected	MRDL/TT Violation	Sample Dates	Possible Source(s) of Contamination
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

Disinfectants in the Distribution System

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

Lead and Copper
Monitored in the distribution system

Contaminant	AL at the 90 th Percentile	MCLG	Units	90 th Percentile	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	June – July 2021	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	15	0	ppb	6.8	73	2	No	June – July 2021	Corrosion of household plumbing systems; erosion 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	1.2	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	ppb	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	Average Level Detected	Range	Units	Sample Dates	Potential Sources of Contamination
Haloacetic Acids 5 (HAA5)	33.9	10.2 – 55.0	ppb	Jan, Apr, Jul, Oct 2018	Byproduct of drinking water disinfection
Brominated Haloacetic Acids 6 (HAABr6)	3.18	0.79 – 9.10	ppb	Jan, Apr, Jul, Oct 2018	Byproduct of drinking water disinfection
Haloacetic Acids 9 (HAA9)	36.4	14.5 – 57.0	ppb	Jan, Apr, Jul, Oct 2018	Byproduct of drinking water disinfection

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 [Utilities Board \(csu.org\)](http://www.csu.org) 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 [Water Quality Report \(csu.org\)](http://www.csu.org).

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 naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes

regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Lead in Drinking Water

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water and removing lead pipes, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact 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

customers, to be informed about the services we provide and the quality water we deliver to you every day.

Our Water Sources

<u>Sources (Water Type - Source Type)</u>	<u>Potential Source(s) of Contamination</u>
<p>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) PURCHASED FROM CO0121150 (Surface Water-Consecutive Connection) S13 WELL (Groundwater-Well) S14 WELL (Groundwater-Well) S15 WELL (Groundwater-Well) S16 WELL (Groundwater-Well) S17 WELL (Groundwater-Well) FV4 WELL (Groundwater-Well) 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)</p>	<p>EPA Abandoned Contaminated Sites, EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Pasture / Hay, Deciduous Forest, Septic Systems, Road Miles</p>

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 <i>OR</i> 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	20	No	4.0 ppm

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
Copper	01/05/2022 to	0.93	60	ppm	1.3	0	No	Corrosion of 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	ppb	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	ppb	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	6.71	0 to 25	16	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2022	17.07	2.6 to 55.02	16	ppb	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

Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
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 of natural deposits

Nitrate: *Nitrate in drinking water at levels above 10 ppm* is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Secondary Contaminants**

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

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	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 the contaminants that were included in UCMR monitoring can be found at: drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR. Learn more about the EPA UCMR at: epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800) 426-4791 or epa.gov/ground-water-and-drinking-water.



Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions