

Fallbrook Public Utility District

2025 WATER QUALITY REPORT



Fallbrook Public Utility District and its staff takes pride in providing reliable and safe water to our consumers. We test our drinking water quality for many constituents, as required by State and Federal Regulations. This report shows the results of our monitoring from calendar year 2024. This data was collected between January 1 and December 31, 2024.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

The sources of our drinking water may 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.

Type of water sources in use: Recently, in December of 2021 and after 70 years of litigation, the district started providing treated water to its customers from the Santa Margarita Groundwater Treatment Plant (SMGTP). This facility can produce up to 7.8 million gallons a day. Flows are calculated based off water rights and predetermined based off the water table in the Santa Margarita River, located on Camp Pendleton. While FPUD is a water retailer, a portion of our water is purchased from Eastern Municipal Water District, which purchases much of its water from the Metropolitan Water District of Southern California. This water is treated at Metropolitan's Lake Skinner Filtration Plant in Riverside County.

Name & location of source(s): FPUD receives virtually all its water from three sources: a 242-mile-long aqueduct that brings Colorado River water from Lake Havasu to Southern California, a 444-mile-long aqueduct that carries water from the Feather River in northern California through the Delta to State Water Project contractors throughout the state and from Camp Pendleton through a 6.3-mile pipeline to our SMGTP. The groundwater from Camp Pendleton is supplied from 10 wells located near the Santa Margarita Riverbed, located on the Marine Corps Base. These wells are managed and maintained by Camp Pendleton staff. One percent of FPUD water comes from a local well (Capra Well). Capra Well is located in the eastern region of our district and the groundwater from the well is pumped directly into Red Mountain Reservoir. The well water is 100% treated through the RMR UV Facility and receives full treatment including 3-log Cryptosporidium inactivation and 3-log Giardia inactivation through the UV treatment system and 4-log virus activation with the addition of chlorine. Monthly bacteriological samples are taken from the well, along with predetermined analytical samples directed through the State Water Resource Control Board-Division of Drinking Water (SWRCB-DDW) throughout the year.

Protection of drinking water is everyone's responsibility. You can help protect our community's drinking water sources in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can potentially reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose of chemicals properly; take used motor oil to a recycling center.

Safety is our #1 priority! Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. The information in this report is to provide you with water quality information collected during 2024. Details about where the sample results were detected, what the results were, and how they compare to Federal and State standards are included.

Time and place of regularly scheduled board meetings: Every fourth Monday of the month at 4 p.m. in the district boardroom, located at 990 E. Mission Road. They are open to the public.

For more information contact: Noelle Denke, Public Information Officer, (760) 999-2706.

We take extra measures to ensure we have high-quality water supplies

- The District's Red Mountain Reservoir is an open reservoir with a capacity of 435 million gallons and is used to store treated water purchased from Eastern Municipal Water District. The open reservoir met the health standards of the day when it was constructed in 1949 and was reconstructed and lined in 1985, and it has continued to meet or exceed water quality standards. Drainage collection and diversion ditches prevent local runoff water from entering the reservoir. The reservoir is physically inspected at least twice daily. Bacteriological tests are taken once a week. FPUD upgraded its disinfection facilities in early 2010 by installing Ultraviolet Technology (UV Technology) for additional disinfection.
- The water the District purchases from Eastern Municipal Water District, is a blend of fully treated Colorado River and State Water Project water that receives complete conventional treatment, along with ozone treatment – a cutting-edge, high-quality disinfection process. The water is treated at the Metropolitan Water District's Skinner Filtration Plant.
- The groundwater the District provides from the SMGTP is treated by state of the art Reverse Osmosis (RO) and Granular Activated Carbon (GAC) processes to provide a high quality supply that meets or exceeds the quality from our imported supplies.

LT2ESWTR Treatment Technique Violation Reporting

On 9/13/24 the Red Mountain UV Facility lost power and was not able to provide proper treatment for the water leaving the Red Mountain Reservoir. FPUD notified the SWRCB-DDW and followed all recommendations throughout the process. This event required a Tier 1 notification to take place. The duration of the untreated water flowing from the treatment facility was 101 minutes until crews were able to reverse the flow and push the untreated water from the distribution system back into Red Mountain Reservoir. Additional flushing of the distribution system also took place as a secondary precaution. As a precautionary measure, the Department of Environmental Health and Quality was notified, and the details of the conditions were explained. Customers residing in the Red Mountain Zone were also informed via phone and email. They were instructed to boil their water until two consecutive days of bacteriological sampling confirmed the absence of harmful bacteria. Bottled water was made available to the affected customers at the district office during this time. All the bacteriological samples returned negative results, and the boil-water notice was lifted with approval from SWRCB-DDW. Additional safeguards have been implemented at the treatment facility to prevent future recurrence.

Please make sure your contact information is updated and on file in the District's system. This can be accomplished by calling our customer service representative at (760) 728-1125. This is the easiest way for us to notify our customers of an emergency, including water outages.

Terms Used In This Report:

Long Term 2 Enhanced Surface Water Treatment Rule (LT2ESWTR): are to protect public health from illness due to Cryptosporidium and other microbial pathogens in drinking water and contains provisions for systems with uncovered reservoirs

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to one's health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. These are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standards (PDWS): MCLs or MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to one's health. PHGs are set by the California Environmental Protection Agency.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

State Water Resource Control Board-Division of Drinking Water (SWRCB-DDW): regulates public drinking water systems.

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

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

NA: Not applicable, indicate when there is no established level

ND: Not detectable at testing limit

NL: Notification Level to SWRCB

SI: Saturation Index

µS/cm: Measure of electrical conductance

pCi/L: Picocuries per liter (a measure of radiation)

ppm or mg/L: Parts per million or milligrams per liter

ppb or µg/L: Parts per billion or micrograms per liter

ppt or ng/L: Parts per trillion or micrograms per liter

LRAA: Locational Running Annual Average; The LRAA is the highest Individual of all Running Annual Averages. It is calculated as an average of all the samples collected within a 12-month period.

Putting Units in Perspective

UNITS	UNITS	EQUIVALENCE
mg/L = milligrams per liter	ppm = parts per million	1 second in 11.5 days
µg/L = micrograms per liter	ppb = parts per billion	1 second in nearly 31.7 years
ng/L = nanograms per liter	ppt = parts per trillion	1 second in nearly 31,700 years
pg/L = picograms per liter	ppq = parts per quadrillion	1 second in nearly 31,700,000 years

***By comparison, a sample result of 15 ppb, is the same as 15 µg/L, is the same as stating 15 seconds in 31.7 years.**

Contaminants that may be present in source water include:

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

Site of our Water Reclamation Plant on Alturas Road, before Camp Pendleton was there.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

For more information about contaminants and potential health effects, or for USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants, call the USEPA Safe Drinking Water Hotline (1-800-426-4791). Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

The tables that follow list the drinking water contaminants that were detected during the most recent sampling. If you do not see a contaminant listed here, it was not detected in 2024. The presence of these contaminants does not necessarily indicate that the water poses a health risk. The State Water Resource Control Board (SWRCB) allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though it is representative of the water quality, is more than one year old.

TABLE 1 - Sampling results showing the detection of E.coli bacteria for the FPUD Distribution system

Microbiological Contaminants	State or Federal MCL (Maximum Contaminant Level)	MCL	MCLG	Average	Range	Months in violation	Typical Source of Bacteria
Total Coliform Bacteria	More than 5.0% (TT) of monthly samples are positive;	5.0% Positive	0	0	0 -1.7%	0	Naturally present in the environment
E.coli (State Revised Total Coliform Rule)	A routine sample and a repeat sample detect total coliform, and either sample also detects fecal coliform or E.coli	0	0	0		0	E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal waste

The Revised Total Coliform Rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The U.S. EPA anticipates greater public health protection as the rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. Fallbrook met the RTCR and no assessments were required. DDW regulations require FPUD to test a minimum of 11 samples per week throughout our distribution system for total coliform bacteria, and to report the results, including the percentage of total coliform positive samples in a given month.

TABLE 2 - Lead and copper rule

Sampling results showing the detection of lead and copper for residential customers

Lead and Copper (Sampled August 2024. FPUD will test again during June-September 2027	Action Level	PHG	No. of sites exceeding Action Level	No. of samples collected	90th percentile level detected	Typical Source of Contaminant
Lead (µg/L)	15	0.2	0	32	1.2	Internal corrosion of household plumbing systems; erosion of natural deposits
Copper (mg/L)	1.3	0.3	0	32	.160	Internal corrosion of household plumbing systems; erosion of natural deposits

Some people may be more vulnerable to contaminants in drinking water than the general population.
Immuno-compromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with other immune system disorders, and some elderly and infants, can be particularly at risk for infection. These people should seek advice from their healthcare providers.

What about lead? Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Fallbrook Public Utility District is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formulas, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Fallbrook Public Utility District at (760) 728-1125. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead. To identify the material used in your home's service line, a service line inventory has been prepared and can be accessed at: https://www.fpud.com/lead-and-copper-service-line-map

TABLE 3 - Detection of contaminants with a primary (health-related) drinking water standard
Sample results are a combination of samples taken from purchased Lake Skinner Water, treated water from the SMGTP and our Distribution System. All results are for potable treated water delivered to our customer's taps.

Water Clarity - Lake Skinner Filter Effluent Turbidity				
Turbidity (NTU)	TT = 95% of samples ≤ 0.3 NTU	Lake Skinner Combined Filter Effluent Turbidity (NTU)	Max Level Found = 0.07 100% of samples ≤ 0.3	Soil Runoff. Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth.

Water Clarity - Fallbrook Facility and Distribution System Turbidity								
CHEMICAL PARAMETERS	Units	MCL	DLR	Santa Margarita		Distribution System		MAJOR SOURCES IN DRINKING WATER
				Average	Range	Average	Range	
Turbidity	NTU	5	0.1	.03	0 - .23	.23	.10 - .61	Soil runoff

Turbidity is a measure of the cloudiness of the water and is regulated as a Treatment Technique (TT) – an indicator of the effectiveness of our treatment.

TABLE 4 - Primary standards (mandatory health related standards)

CHEMICAL PARAMETERS	Units	MCL	PHG (MCLG)	DLR	Treatment Plant				Distribution System		MAJOR SOURCES IN DRINKING WATER
					Lake Skinner		Santa Margarita				
					Average	Range	Average	Range	Average	Range	
Aluminum	ppb	1000	600	50	74	ND - 160	ND	ND	ND	ND	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic*	ppb	10	0.004	2	ND	ND	ND	ND – 6.6	ND	ND – 2.6	Erosion of natural deposits, glass and electronics production waste
Barium	ppb	1000	2000	100	ND	ND	47	37 - 55	55	53 - 56	Erosion of natural deposits; discharges of oil drilling wastes
Total Chromium	ppm	50	(100)	1	ND	ND	ND	ND – 5.0	ND	ND	Erosion of natural deposits
Copper	ppb	AL = 1300	300	50	ND	ND	ND	ND	8	6.9 - 9.2	Erosion of natural deposits; Internal corrosion of household pipes
Fluoride (treatment-related)	ppm	2	1	.1	.7	.6 - .8	.63	.53 - .71	.62	.55 - .95	Erosion of natural deposits; water additive that promotes strong teeth
Nitrate (as Nitrogen)	ppm	10	10	.4	ND	ND	ND	ND - .53	.59	.56 - .62	Erosion of natural deposits; runoff and leaching from fertilizer use
Nitrate (as Nitrogen)	ppm	1	1	.4	ND	ND	NA	NA	ND	ND - .40	Erosion of natural deposits; runoff and leaching from fertilizer use
Perfluorooctanoic Acid (PFOA)	ppt	4.0	0	-	ND		ND		ND		Industrial chemical factory discharges and various industrial processes
Perfluorooctanesulfonic Acid (PFOS)	ppt	4.0	0	-	ND		ND		ND		Industrial chemical factory discharges and various industrial processes
Selenium	ppb	50	30	5	ND	ND	ND	ND – 22	7.8	7.4 – 8.1	Naturally occurring in arid regions; industrial waste discharge

*While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

What is meant by primary drinking water standards? The National Primary Drinking Water Regulations (NPDWR) are legally enforceable primary standards and treatment techniques that apply to public water systems. Primary standards and treatment techniques protect public health by limiting the levels of contaminants in drinking water. Primary standards (MCLs) are developed for the purpose of protecting the public from possible health risks associated with long-term exposure to contaminants. These results are significantly below their respective MCLs. In general, no health hazard is expected to exist when contaminant levels are below a Primary MCL.

TABLE 5 - Radiological

CHEMICAL PARAMETERS	Units	MCL	PHG (MCLG)	DLR	Lake Skinner		Santa Margarita		Distribution System		MAJOR SOURCES IN DRINKING WATER
					Average	Range	Average	Range	Average	Range	
Gross Alpha	pCi/L	15	(0)	3	ND	ND - 4	NA		NA		Erosion of natural deposits
Gross Beta	pCi/L	50	(0)	4	2	ND - 5	NA		NA		Decay of natural and manmade deposits
Uranium	pCi/L	20	.43	1	2	ND - 3	NA		NA		Erosion of natural deposits

How do radiological particles get into the drinking water? As water travels over the surface of the land or in underground aquifers, it dissolves naturally occurring minerals and, in some cases, radioactive material. Radioactive materials can be naturally occurring or a result of oil and gas mining activities. The results in the table above are presented in units of picocuries per liter (pCi/L), a standard measurement.

TABLE 6 - Disinfection residuals, disinfection by-products and precursors (Federal Rule)

CHEMICAL PARAMETERS	Units	MCL (MRDL)	PHG (MRDLG)	MWD Distribution		Distribution System		MAJOR SOURCES IN DRINKING WATER
				Average	Range	Average	Range	
Bromate (ppb)	ppb	10	0.1	1.5	ND - 6.0	NA		Byproduct of drinking water ozonation
Total Chlorine Residual *Highest RAA*	ppm	(4)	(4)	2.5	1.6 - 3.0	1.84	0.07 – 3.12	Drinking water disinfectant added for treatment
Haloacetic Acids (five) *Highest LRAA*	ppb	60	NA	12	1.2 - 23	17.1	2.0 – 21	Byproduct of drinking water disinfection
Total Trihalomethanes *Highest LRAA*	ppb	80	NA	34	15 - 48	51	3.4 – 53	Byproduct of drinking water disinfection

Drinking water must be disinfected to ensure that any potentially harmful microbes are neutralized. However, all disinfectant strategies have the potential to create a byproduct. When ozone is used, bromate is monitored as a disinfection byproduct. Both Metropolitan and Fallbrook use chloramines as our final disinfection to carry a residual to our customers. This is a mixture of chlorine and ammonia. The disinfection byproducts from chloramines that the EPA and DDW regulate are Total Trihalomethanes (THMs) and Haloacetic Acids (HAA5). As drinking water travels through the distribution system to homes and businesses, a disinfectant residual must be maintained in order to prevent growth of potentially harmful microbes.

TABLE 7 – Secondary standards (aesthetics standards)

CHEMICAL PARAMETERS	Units	CA SMCL	DLR (MDL)	Treatment Plant				Distribution System		MAJOR SOURCES IN DRINKING WATER
				Lake Skinner		Santa Margarita				
				Average	Range	Average	Range	Average	Range	
Aluminum	ppb	200	50	74	ND - 160	ND	ND	ND	ND	Erosion of natural deposits; residue from some surface water treatment processes
Chloride	ppm	500	(0.5)	96	92 - 100	101	80 - 170	100		Runoff/leaching from natural deposits; seawater influence
Color	Units	15	1	2	1 - 2	ND	ND	ND	ND - 5	Naturally - occurring organic materials
Copper	ppb	1000	5	ND		ND	ND	8.1	6.9 - 9.2	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Odor - Threshold	TON	3	1	1		ND	ND	ND	ND - 4	Naturally - occurring organic materials
Specific Conductance	µS/cm	1600	NA	910	903 - 917	769	630 - 860	820		Substances that form ions when in water; seawater influence
Sulfate	ppm	500	0.5	199	195 - 203	132	98 - 240	130		Runoff/leaching from natural deposits; industrial waste
Total Dissolved Solids	ppm	1000	10	566	560 - 572	453	370 - 520	475	470 - 480	Runoff/leaching from natural deposits

What are secondary drinking water standards? Secondary standards are set to protect the odor, taste, and appearance of drinking water. These parameters are not considered to present a risk to human health at or above Secondary MCL levels. If present at or above the Secondary MCL, these parameters may cause the water to appear cloudy or colored, or to have a different or unusual taste or odor.

TABLE 8 – Other parameters that may be of interest

CHEMICAL PARAMETERS	Units	Notification Level	Treatment Plant				Distribution System		MAJOR SOURCES IN DRINKING WATER
			Lake Skinner		Santa Margarita				
			Average	Range	Average	Range	Average	Range	
Alkalinity	ppm	NA	105	103 - 107	138	120 - 150	145	140 - 150	Naturally present in the environment
Bicarbonate (HCO_3)	ppm	NA	NA	NA	137	120 - 150	145	140 - 150	Naturally present in the environment
Boron	ppb	NL = 1,000	130		NA		NA		Runoff leaching from natural deposits; industrial waste
Calcium Carbonate Precipitation Potential (CCPP) (as CaCO3)	ppm	NA	7.6	5 - 10	NA		NA		A measure of the balance between pH and calcium carbonate saturation in the water
Calcium	ppm	NA	62	61 - 62	49	37 - 56	55	54 - 56	Naturally present in the environment
Chlorate	ppb	800	80		NA		NA		Byproduct of drinking water chlorination; industrial processes
Corrosivity	SI	NA	.52	.46 - .57	NA		NA		Elemental balance in water; affected by temperature, other factors
Hardness *Conversion to grains below	ppm	NA	242	242 - 243	208	160 - 240	235	230 - 240	Consists of Magnesium and Calcium and is usually naturally occurring
Lithium	ppb	NA	28	24 - 32	ND		36.9	ND – 51.6	Naturally-occurring; used in electrochemical cells
Magnesium	ppm	NA	22	22 - 23	21	15 - 23	23	22 - 23	Naturally present in the environment
N-Nitrosodimethylamine [NDMA]	ppt	10	2.5		NA		NA		Byproduct of drinking water chloramination; industrial process
Perfluoropentanoic acid (PFPeA)	ppt	NA	ND		ND	ND – 2.4	ND		Industrial chemical factory discharges and various industrial processes
Perfluorobutanoic acid (PFBA)	ppt	NA	ND		4.5	3.0 – 5.7	ND		Industrial chemical factory discharges and various industrial processes
pH	pH	NA	8.1		8.2	7.9 – 8.4	8.2	7.7 – 8.8	Various industrial processes
Potassium	ppm	NA	4.8	4.6 – 4.9	2.0	1.6 – 2.4	2.2	2.1 – 2.2	pH is a physical measure of water acidity
Sodium	ppm	NA	93	91 - 95	79	71 - 91	88	86 - 89	Salt present in the water; naturally-occurring
TOC *Total Organic Compounds*	ppm	TT	2.6	2.3 - 3	NA		NA		Various natural and manmade sources

* During 2024, FPUD's water hardness averaged 235 milligrams per liter (mg/L) which equals 13.7 grains per gallon (1 grain = 17.1 mg/L). This is considered "very hard" water.

Federal UCMR 5 (2023 – 2025 Monitoring)

The Fifth Unregulated Contaminant Monitoring Rule (UCMR5) was published by the U.S. EPA in December 2021. As part of this rule, public water systems (PWS) are required to monitor for 29 PFAS and lithium, during a 12-month period from January 2023 through December 2025.

During the UCMR 5 sampling event, water was sampled from 3 separate locations. One from the discharge of the SMGTP, one from our purchased water connection FB6 and a blend representing purchased water/Red Mountain water treated from the UV facility/Capra Well. None of the sample results detected the listed PFAS chemicals. The UCMR 5 took place over a four-quarter sampling period. Each period was given a sample event identification code for each sample event: SE1, SE2, SE3, SE4. The table below shows each of the chemicals included in monitoring and the associated minimum reporting level.

TABLE 9 - UCMR 5 chemicals and minimum reporting levels

29 PFAS Chemicals	Units	Minimum Reporting Level	Sample Date and Schedule			
			11/28/2023 SE1	2/5/2024 SE2	5/12/2024 SE3	8/5/2024 SE4
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	µg/L	0.005	ND	ND	ND	ND
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2FTS)	µg/L	0.005	ND	ND	ND	ND
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	µg/L	0.003	ND	ND	ND	ND
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	µg/L	0.005	ND	ND	ND	ND
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	µg/L	0.003	ND	ND	ND	ND
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	µg/L	0.002	ND	ND	ND	ND
hexafluoropropylene oxide dimer acid (HFPO-DA)(GenX)	µg/L	0.005	ND	ND	ND	ND
nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	µg/L	0.02	ND	ND	ND	ND
perfluoro (2-ethoxyethane) sulfonic acid (PFEESA)	µg/L	0.003	ND	ND	ND	ND
perfluoro-3-methoxypropanoic acid (PFMPA)	µg/L	0.004	ND	ND	ND	ND
perfluoro-4-methoxybutanoic acid (PFMBA)	µg/L	0.003	ND	ND	ND	ND
perfluorobutanesulfonic acid (PFBS)	µg/L	0.003	ND	ND	ND	ND
perfluorobutanoic acid (PFBA)	µg/L	0.005	ND	ND	ND	ND
perfluorodecanoic acid (PFDA)	µg/L	0.003	ND	ND	ND	ND
perfluorododecanoic acid (PFDoA)	µg/L	0.003	ND	ND	ND	ND
perfluoroheptanesulfonic acid (PFHpS)	µg/L	0.003	ND	ND	ND	ND
perfluoroheptanoic acid (PFHpA)	µg/L	0.003	ND	ND	ND	ND
perfluorohexanesulfonic acid (PFHxS)	µg/L	0.003	ND	ND	ND	ND
perfluorohexanoic acid (PFHxA)	µg/L	0.003	ND	ND	ND	ND
perfluorononanoic acid (PFNA)	µg/L	0.004	ND	ND	ND	ND
perfluorooctanesulfonic acid (PFOS)	µg/L	0.004	ND	ND	ND	ND
perfluorooctanoic acid (PFOA)	µg/L	0.004	ND	ND	ND	ND
perfluoropentanesulfonic acid (PFPeS)	µg/L	0.004	ND	ND	ND	ND
perfluoropentanoic acid (PFPeA)	µg/L	0.003	ND	ND	ND	ND
perfluoroundecanoic acid (PFUnA)	µg/L	0.002	ND	ND	ND	ND
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	µg/L	0.005	ND	ND	ND	ND
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	µg/L	0.006	ND	ND	ND	ND
perfluorotetradecanoic acid (PFTA)	µg/L	0.008	ND	ND	ND	ND
perfluorotridecanoic acid (PFTrDA)	µg/L	0.007	ND	ND	ND	ND
lithium	Units µg/L	Minimum Reporting Level	Sample Date and Schedule			
			11/28/2023 SE1	2/5/2024 SE2	5/12/2024 SE3	8/5/2024 SE4
SMGTP Effluent	µg/L	9	0	0	0	0
Purchased Water Connection FB6	µg/L	9	28.3	47.8	44.7	51.6
Blended Water from FB6/RMR/Capra Well	µg/L	9	30.6	0	45.9	31.3

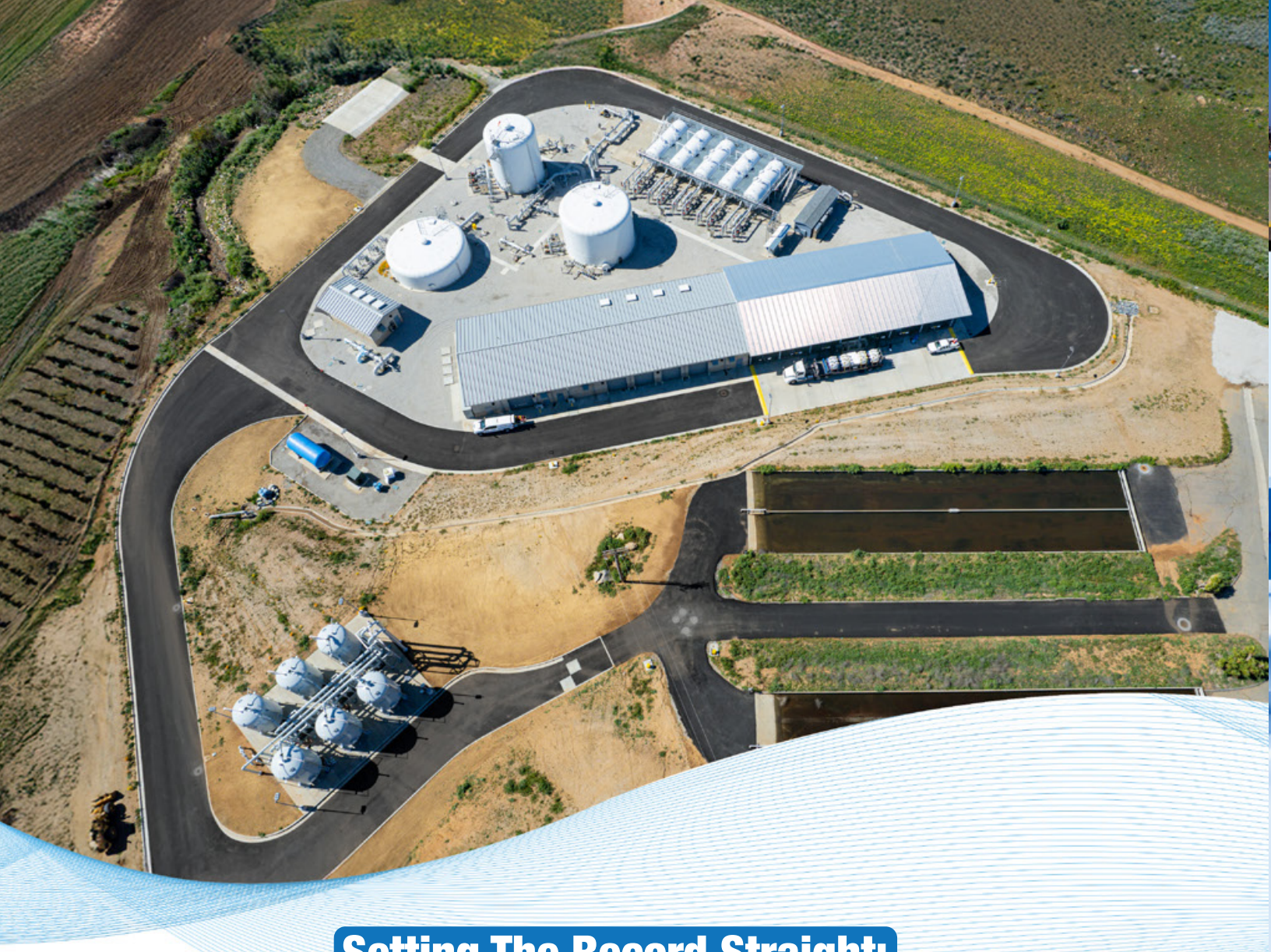
For more information, please visit https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule.

TABLE 10 – Additional groundwater parameters

The source of these water samples is untreated influent groundwater that supplies SMGTP.

Constituent (CCR units)	MCL	PHG	Average	Range	Sample Date	Violation	Typical Source
Fluoride (naturally occurring in ground water source) (ppm)	2.0	1	0.27	0.25– 0.29	2024	N/A	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories

The addition of fluoride: At SMGTP, our facility adds fluoride to the treatment process to match the existing water purchased from Eastern Municipal Water District. Our water system treats the water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. State regulations require the fluoride levels in the treated water be maintained within a range of 0.7 to 1.3. Although the Division of Drinking Water has set a goal for the SMGTP of 0.6 to 1.0 mg/L with an optimum dose of 0.7 mg/L. Above is the chart showing the natural existing amount entering the facility. Our monitoring showed that the fluoride levels in the effluent treated water ranged from 0.53 to 0.71 mg/L with an average of 0.63 mg/L. Information about fluoridation, oral health, and current issues is available at http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.



Setting The Record Straight:

Here are some things we have done in the past few years to reduce the impact of rising water costs:

- **We switched water wholesalers, effective Jan. 1, 2024. We switched from buying our imported water from the San Diego County Water Authority to Eastern Municipal Water District.**
  - This saves us 30% or more on our imported water costs.
  - This savings enabled us to implement a rate decrease, effective Jan. 1, 2024 that lowered the average residential water bill by 5%.
  - This also lowered bills for commercial and agricultural customers.
  - This also resulted in a slight decrease on property tax bills. Some charges that were specific to the San Diego County Water Authority were replaced by smaller charges from Eastern.
  - This is the same water, off the same pipeline, that we were using before.
- **We began using local water from the Santa Margarita River in December 2021.**
  - Local water (or local ANYTHING) is cheaper than imported water.
  - We're using about 50% local water on average, annually. This reduces our imported water purchases, which previously had been 100% of our water supply.
  - The Santa Margarita River flows right through Fallbrook, but for about seven decades, we were involved in one of the longest-running federal lawsuits over water rights to the river. Now with that lawsuit behind us, we share the river's water with Camp Pendleton.
- **We are working with three other water agencies to share resources in an effort to save costs.**
  These can include sharing crews in a shutdown or emergency, specialized vehicles, legislative outreach and advocacy efforts.

Fallbrook Public Utility District

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