

ANNUAL WATER QUALITY REPORT

Reporting Year 2022



Presented By
**Walnut Valley
Water District**

Our Mission Continues

We are pleased to present the annual water quality report covering all testing performed between January 1 and December 31, 2022. WVWD is dedicated to providing drinking water that meets all state and federal standards. The team of water professionals strive to adopt new methods for delivering the highest-quality drinking water to you. As new challenges to drinking water safety emerge, WVWD remains vigilant in ensuring quality and safe drinking water while providing water education and conservation information for the benefit of the WVWD community. Please remember that we are always available should you ever have any questions or concerns about your water.

Community Water Fluoridation

The safety and benefits of fluoride are well documented. For over 70 years, U.S. citizens have benefited from drinking water containing fluoride, leading to better dental health. Drinking fluoridated water keeps teeth strong and reduces tooth decay by approximately 25 percent in children and adults.

Over the past several decades, there have been major improvements in oral health. Still, tooth decay remains one of the most common chronic diseases of childhood. Community water fluoridation has been identified as the most cost-effective method of delivering fluoride to all members of the community, regardless of age, educational attainment, or income level.

Nearly all water contains some fluoride, but usually not enough to help prevent tooth decay or cavities. Public water systems can add the right amount of fluoride to the local drinking water to prevent tooth decay.

Community water fluoridation is recommended by nearly all public health, medical, and dental organizations in the U.S. Because of its contribution to the dramatic decline in tooth decay, the CDC named community water fluoridation one of the greatest public health achievements of the 20th century. (Courtesy of CDC: [cdc.gov/fluoridation](https://www.cdc.gov/fluoridation))

Important Health Information

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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

“Thousands have lived without love, not one without water.”

—W.H. Auden

Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

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 Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The 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. 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 water poses a health risk.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

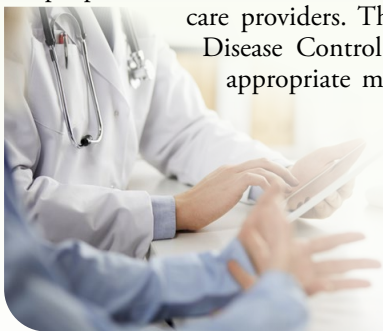
Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

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 which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

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

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



Water Conservation Tips

You can play a role in conserving water and save yourself money in the process by looking for ways to use less whenever you can. Here are a few tips to help you save water:

- Automatic dishwashers use four gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances. Then check the meter after 15 minutes. If it moved, you may have a leak.

What Are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of manufactured chemicals used worldwide since the 1950s to make fluoropolymer coatings and products that resist heat, oil, stains, grease, and water. During production and use, PFAS can migrate into the soil, water, and air. Most PFAS do not break down; they remain in the environment, ultimately finding their way into drinking water. Because of their widespread use and their persistence in the environment, PFAS are found all over the world at low levels. Some PFAS can build up in people and animals with repeated exposure over time.

The most commonly studied PFAS are perfluorooctanoic acid (PFOA) and perfluorooctane sulfonic acid (PFOS). PFOA and PFOS have been phased out of production and use in the United States, but other countries may still manufacture and use them.

Some products that may contain PFAS include:

- Some grease-resistant paper, fast food containers/wrappers, microwave popcorn bags, pizza boxes
- Nonstick cookware
- Stain-resistant coatings used on carpets, upholstery, and other fabrics
- Water-resistant clothing
- Personal care products (shampoo, dental floss) and cosmetics (nail polish, eye makeup)
- Cleaning products
- Paints, varnishes, and sealants

Even though recent efforts to remove PFAS have reduced the likelihood of exposure, some products may still contain them. If you have questions or concerns about products you use in your home, contact the Consumer Product Safety Commission at (800) 638-2772. For a more detailed discussion on PFAS, please visit <http://bit.ly/3Z5AMm8>.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. WVWD is responsible for providing high-quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering your plants. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or at www.epa.gov/safewater/lead.



Where Does My Water Come From?

The district is dependent on surface water imported by the Metropolitan Water District of Southern California (MWD). MWD imports and treats surface water transported through two major conveyance systems: the 242-mile-long Colorado River Aqueduct and the 444-mile-long State Water Project (SWP). Water transported via the Colorado River Aqueduct originates in the Colorado River basin states, and water transported by the SWP originates in the Sacramento-San Joaquin Delta. MWD treats this water at its F. E. Weymouth Water Treatment Plant in the City of La Verne. The water is then purchased by the district through our designated wholesale water agency, Three Valleys Municipal Water District (TVMWD). The district also receives SWP water treated by TVMWD at its Miramar Water Treatment Plant in Claremont.

Source Water Assessment

The Colorado River Watershed Sanitary Survey 2020 Update was submitted to the Division of Drinking Water (DDW) in April 2022. The State Water Project Watershed Sanitary Survey 2021 Update was submitted to the DDW in June 2022. Colorado River supplies are considered to be most vulnerable to recreation, urban and stormwater runoff, increasing urbanization in the watershed, and wastewater. SWP supplies are considered to be most vulnerable to urban and stormwater runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD at (213) 217-6000.



Water Quality Test Results

Our water is monitored and tested on a very strict sampling schedule, and the water we deliver must meet specific health standards. In this water quality report, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES													
				Walnut Valley Water District		Metropolitan Water District of Southern California		Three Valleys Municipal Water District (Miramar Plant Effluent)		Three Valleys Municipal Water District (Groundwater)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2022	1	2	NA	NA	0.107	NA	ND	NA	NA	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2022	10	0.1	NA	NA	ND	ND–7.6	NA	NA	NA	NA	No	By-product of drinking water disinfection
Chloramines (ppm)	2022	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	2.43	2.3–2.64	2.5	0.4–2.9	2.65	2.54–2.77	NA	NA	No	Drinking water disinfectant added for treatment
Combined Radium (pCi/L)	2022	5	(0)	NA	NA	ND	NA	NA	NA	0.148	NA	No	Erosion of natural deposits
Fluoride (ppm)	2022	2.0	1	NA	NA	0.7	0.6–0.8	0.17	NA	NA	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Beta Particle Activity (pCi/L)	2022	50 ¹	(0)	NA	NA	6	4–7	5.82	NA	NA	NA	No	Decay of natural and human-made deposits
HAA5 [sum of 5 haloacetic acids]–Stage 2 (ppb)	2022	60	NA	3.43	1.2–9.2	ND	ND–7.6	6.225	2.3–10.3	NA	NA	No	By-product of drinking water disinfection
Nitrate [as nitrogen] (ppm)	2022	10	10	NA	NA	ND	NA	0.35	ND–0.57	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radium 226 (pCi/L)	2022	NA	0.05	NA	NA	ND	NA	NA	NA	0.147	NA	No	Erosion of natural deposits
Radium 228 (pCi/L)	2022	NA	0.019	NA	NA	ND	ND–1	NA	NA	0.001	NA	No	Erosion of natural deposits
Strontium 90 (pCi/L)	2022	8	0.35	NA	NA	ND	NA	0.330	NA	NA	NA	No	Decay of natural and human-made deposits
Tritium (pCi/L)	2022	20,000	400	NA	NA	ND	NA	170	NA	NA	NA	No	Decay of natural and human-made deposits
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2022	80	NA	20.14	13.8–26.3	29	21–32	34.39	31.3–40	NA	NA	No	By-product of drinking water disinfection
Turbidity (NTU)	2022	TT	NA	NA	NA	NA	0.04	NA	NA	NA	NA	No	Soil runoff
Uranium (pCi/L)	2022	20	0.43	NA	NA	2	1–3	NA	NA	NA	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2021	1.3	0.3	0.099	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2021	15	0.2	4	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	Walnut Valley Water District		Metropolitan Water District of Southern California		Three Valleys Municipal Water District (Miramar Plant Effluent)		Three Valleys Municipal Water District (Groundwater)		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppb)	2022	200	600	NA	NA	156	58–240	ND	NA	NA	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2022	500	NS	NA	NA	102	98–105	ND	NA	NA	NA	No	Runoff/leaching from natural deposits; seawater influence
Color (units)	2022	15	NS	1.15	NA	1	NA	ND	NA	NA	NA	No	Naturally occurring organic materials
Foaming Agents [MBAS] (ppb)	2022	500	NS	NA	NA	ND	NA	0.14	ND–0.28	NA	NA	No	Municipal and industrial waste discharges
Odor, Threshold (TON)	2022	3	NS	ND	NA	3	NA	1	NA	NA	NA	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2022	1,600	NS	NA	NA	992	964–1,020	480	NA	NA	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2022	500	NS	NA	NA	222	212–232	50	NA	NA	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2022	1,000	NS	NA	NA	638	632–643	260	NA	NA	NA	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2022	5	NS	0.08	NA	ND	NA	ND	NA	NA	NA	No	Soil runoff



UNREGULATED SUBSTANCES ²

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Walnut Valley Water District		Metropolitan Water District of Southern California		Three Valleys Municipal Water District (Miramar Plant Effluent)		Three Valleys Municipal Water District (Groundwater)		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Alkalinity, Total [as CaCO₃] (ppm)	2022	NA	NA	127	126–128	83.25	76–86	NA	NA	Runoff/leaching of natural deposits: carbonate, bicarbonate, hydroxide, and occasionally borate, silicate, and phosphate
Boron (ppb)	2022	NA	NA	140	NA	180	NA	NA	NA	Runoff/leaching from natural deposits; industrial wastes
Calcium (ppm)	2022	NA	NA	70	68–71	24	23–25	NA	NA	Runoff/leaching from natural deposits
Calcium Carbonate Precipitation Potential [CCPP; as CaCO₃] (ppm)	2022	NA	NA	9.4	5.7–11	NA	NA	NA	NA	Measures of the balance between pH and calcium carbonate saturation in the water
Chlorate (ppb)	2022	NA	NA	88	NA	ND	NA	NA	NA	By-product of drinking water chlorination; industrial processes
Corrosivity [as aggressiveness] (units)	2022	NA	NA	12.5	NA	12.21	NA	NA	NA	Measures of the balance between pH and calcium carbonate saturation in the water
Corrosivity [as saturation] (units)	2022	NA	NA	0.60	0.56–0.63	0.40	NA	NA	NA	Measures of the balance between pH and calcium carbonate saturation in the water
Hardness, Total [as CaCO₃] (ppm)	2022	NA	NA	279	277–281	82	NA	NA	NA	Runoff/leaching from natural deposits; sum of polyvalent cations, generally magnesium and calcium present in the water
Magnesium (ppm)	2022	NA	NA	26	25–26	4.9	NA	NA	NA	Runoff/leaching from natural deposits
Perfluoropentanoic Acid [PFPeA] (ppt)	2022	NA	NA	2	NA	NA	NA	NA	NA	Industrial chemical factory discharges; runoff/leaching from landfills; used in fire-retarding foams and various industrial processes
pH (units)	2022	NA	NA	8.1	NA	8.5	NA	NA	NA	Naturally occurring
Potassium (ppm)	2022	NA	NA	4.6	4.5–4.8	1.9	NA	NA	NA	Salt present in the water; naturally occurring
Sodium (ppm)	2022	NA	NA	100	98–103	61	NA	NA	NA	Salt present in the water; naturally occurring
Total Dissolved Solids, Calculated [TDS] (ppm)	2022	NA	NA	602	522–633	260	NA	NA	NA	Runoff/leaching from natural deposits
Total Organic Carbon [TOC] (ppm)	2022	NA	NA	2.4	1.7–2.6	1.35	1.0–1.32	NA	NA	Various natural and human-made sources
Vanadium (ppb)	2022	NA	NA	ND	NA	4.4	NA	NA	NA	Naturally occurring; industrial waste discharge

¹ The State Board considers 50 pCi/L to be the level of concern for beta particles.

² Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.



Community Participation

The District's board meetings are typically scheduled, unless otherwise noted, for 5:00 p.m. on the third Monday of each month. The board meetings are open to the public, and anyone interested in the operations and business of the district is encouraged to attend. For more information, please visit our website, walnutvalleywater.gov.

What Causes the Pink Stain on Bathroom Fixtures?

The reddish-pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, and toothbrush holders and on pets' water bowls is caused by the growth of the bacterium *Serratia marcescens*. *Serratia* is commonly isolated from soil, water, plants, insects, and vertebrates (including humans). The bacteria can be introduced into the house through any of the abovementioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to clean and dry these surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence. *Serratia* will not survive in chlorinated drinking water.

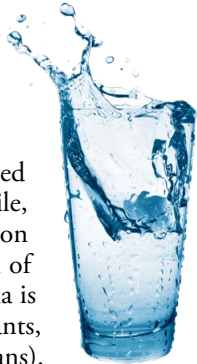


Table Talk

Get the most out of the Testing Results data table with this simple suggestion. In less than a minute, you will know all there is to know about your water:

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL, SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Other Table Information Worth Noting
Verify that there were no violations of the state and/or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. If there is an NA showing, that means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

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

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

MRDL (Maximum Residual Disinfectant Level): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

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

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

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

ppt (parts per trillion): One part substance per trillion parts water (or nanograms per liter).

TON (Threshold Odor Number): A measure of odor in water.

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

QUESTIONS?

For more information about this report, or for any questions related to the quality of your drinking water, please contact Gabe Gaytan, Water Quality Specialist, at GGaytan@wvwd.com or (909) 595-7554, ext. 342.

For any other questions, please call our Customer Service Department at (909) 595-7554 or email cservice@wvwd.com.