ANNUAL WATER QUALITY REPORT

Reporting Year 2023

Presented By

VALLEY OF THE MOON WATER DISTRICT

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

PWS ID#: 4910013

Our Commitment

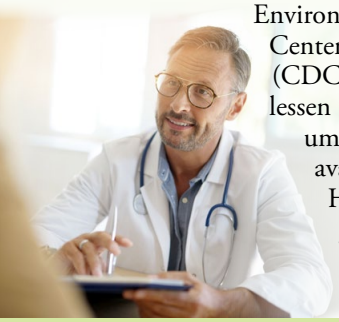
We are pleased to present to you this year's annual water quality report. This report is a snapshot of last year's water quality covering all testing performed between January 1 and December 31, 2023. Included are details about your water sources, what it contains, and how it compares to standards set by regulatory agencies. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water and providing you with this information because informed customers are our best allies.

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. We are responsible for providing high-quality drinking water, but we 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 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 epa.gov/safewater/lead.

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. Environmental Protection Agency (U.S. EPA)/Centers for Disease Control and Prevention (CDC) 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 water.epa.gov/drink/hotline.



Where Does Our Water Come From?

One of the critical factors for water quality is the source of supply: the purer the source, the better the water. Valley of the Moon Water District relies on two sources: the Sonoma County Water Agency and local groundwater wells.

The Sonoma County Water Agency produces water from six Ranney collectors (or caissons) in the Russian River and, to a lesser extent, three groundwater wells in the Santa Rosa plain.

The Russian River originates in central Mendocino County, about 15 miles north of Ukiah. The main channel is 110 miles long and flows southward from the headwaters near Potter Valley to the Pacific Ocean near Jenner. Three main reservoirs, Lake Sonoma, Lake Pillsbury, and Lake Mendocino, feed the river, providing seasonal storage and replenishing the river aquifer.

The river streambed provides natural filtration for the water removed from the Ranney collectors. Sonoma County Water Agency treats the water with chlorine for bacterial disinfection and adds sodium hydroxide (also known as caustic soda) to adjust the pH. Slightly higher pH levels reduce corrosiveness, thereby reducing the amount of copper and lead that could be dissolved into the water from pipes. This high-quality water needs no further treatment when it reaches the district through Sonoma County Water Agency's transmission system.

The district supplements this supply with water from four district-owned and three leased groundwater wells. In 2023 the district purchased 1,674 acre-feet of water from Sonoma County Water Agency and produced 484 acre-feet from our local wells.

Community Participation

The Valley of the Moon Water District encourages the public to voice their concerns, if any, about their drinking water. They may write to the district or attend any of the regularly scheduled board meetings. The board of directors typically meets on the first Tuesday of the month at 6:30 p.m. at the district's office at 19039 Bay Street in Sonoma. The schedule for these meetings, agendas, and board meeting information can be found at the district office and vomwd.org/boardmeetings.

Questions?

For more information about this report, or for other questions relating to water quality, please contact Clayton Church, Water System Manager, at (707) 996-1037.

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. EPA and the State Water Resources Control Board (SWRCB) 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;

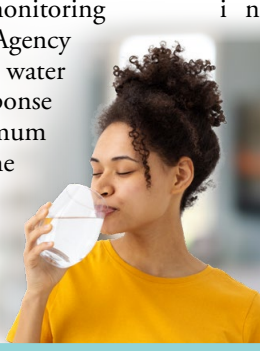
Radioactive Contaminants that can be naturally occurring or can be the result of oil and gas production and mining activities.

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.

Unregulated Contaminant Monitoring

Per the requirements of the fifth stage of the U.S. EPA Unregulated Contaminant Monitoring Rule (UCMR5), Valley of the Moon Water District will be sampling for specific per- and polyfluoroalkyl substances (PFAS) in its water sources in October 2024 and February 2025. The district will complete the initial monitoring required under the U.S. EPA's April 10, 2024, regulation and report those results in the annual Water Quality Report. Depending on those results, the district will begin testing either twice per year or once every three years.

Sonoma County Water Agency, which provides about 80 percent of the district's drinking water, has monitored PFAS for the past five years and will begin quarterly monitoring in April 2024. Sonoma County Water Agency has not found concentrations in the water delivered above the current state response or notification levels or the maximum contaminant levels (MCLs) set by the U.S. EPA on April 10, 2024. For more information on PFAS, visit epa.gov/pfas.



Testing for Radon

Our system collected samples and performed monitoring for radon and found levels of 90.20 picocuries per liter (pCi/L). Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source in indoor air. The U.S. EPA has considered requiring community water suppliers to provide water with radon levels no higher than 4,000 pCi/L (about 44 times the level found in the district's water), which would contribute about 0.4 pCi/L of radon to the air in a home. More information is available at epa.gov/radon.

Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air. Testing is inexpensive and easy. You should pursue radon removal if the level of radon in your home is 4 pCi/L or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, call California's Radon Program (1-800-745-7236), the U.S. EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1-800-767-7236).

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, 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. We are pleased to report that your drinking water meets or exceeds all federal and state requirements.

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

				Sonoma County Water Agency		Valley of the Moon Water District			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2023	10	0.004	ND	NA	2.46	ND–4	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	2023	2.0	1	0.02	ND–0.10	0.18	0.11–0.25	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2023	15	(0)	0.43	ND–1.52	0.26[1]	ND–1.81[1]	No	Erosion of natural deposits
HAA5 [sum of 5 haloacetic acids]–Stage 1 (ppb)	2023	60	NA	6.64	ND–20.02	15.67	12–18	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2023	45	45	ND	NA	1.58	ND–3.6	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [total trihalomethanes]–Stage 1 (ppb)	2023	80	NA	0.01	ND–0.02	34.67	31–39	No	By-product of drinking water disinfection

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)	2023	1.3	0.3	0.19	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2023	15	0.2	ND	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				Sonoma County Water Agency		Valley of the Moon Water District			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2023	500	NS	6.32	5.70–6.9	14.4	5.9–26	No	Runoff/leaching from natural deposits; seawater influence
Iron (ppb)	2023	300	NS	ND	NA	74.29	ND–210	No	Leaching from natural deposits; industrial wastes
Specific Conductance (µS/cm)	2023	1,600	NS	253.33	240–270	277.14	150–410	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2023	500	NS	15.5	14–18	11.39	2–24	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2023	1,000	NS	138.33	110–160	220	160–280	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2023	5	NS	0.03	0.03–0.04	0.67	0.13–2.9	No	Soil runoff

UNREGULATED SUBSTANCES [2]						
		Sonoma County Water Agency		Valley of the Moon Water District		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Calcium (ppm)	2023	24.33	23–26	19.2	9.2–32	Erosion of natural deposits
Magnesium (ppm)	2023	15.33	14–17	11.53	4.9–20	Erosion of natural deposits
pH (units)	2023	7.38	7.26–7.60	7.16	6.9–7.5	Runoff/leaching from natural deposits; industrial wastes
Sodium (ppm)	2023	9.23	8.7–9.5	19.29	14–26	Erosion of natural deposits
Total Hardness (ppm)	2023	123.50	114–135	95.86	43–160	Calcium and magnesium concentration

[1] Year sampled was 2016. Larbre well sampled in 2020, and Craig and Pedroncelli wells sampled in 2023.

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

Source Water Assessment

An assessment of the drinking water sources for Sonoma County Water Agency was completed in January 2001. The sources are considered vulnerable to wastewater treatment and disposal, mining operations, septic systems, and agricultural operations. A copy of the complete assessment is available at the SWRCB, Division of Drinking Water, 50 D Street, Suite 200, Santa Rosa, CA 95404 or waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAP.html.

An assessment of the district's wells was performed in 2003, as required by the U.S. EPA. This assessment identified the sewer collection system as the most likely source of possible contamination to the wells. Please note that no contaminants have been detected in the water supply above state primary drinking water standards; however, the sources are still considered vulnerable to activities located near the drinking water sources. The Valley of the Moon Water District routinely monitors and samples the wells to ensure the water is free from contamination. A copy of the completed assessment is available at the district office, 19039 Bay Street, Sonoma, and waterboards.ca.gov/drinking_water/certlic/drinkingwater/DWSAP.html.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council (NRDC), bottled water is not necessarily cleaner or safer than most tap water. In fact, about 40 percent of bottled water is actually just tap water, according to government estimates.

The Food and Drug Administration (FDA) is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water. For a detailed discussion on the NRDC study results, visit goo.gl/Jxb6xG.

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).

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