




ANNUAL

WATER
QUALITY
REPORT

Water testing performed in 2008



VALLEY OF THE MOON
WATER DISTRICT



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

PWS ID#: 4910013

Meeting the Challenge

We are once again proud to present to you our annual water quality report. This edition covers all testing completed from January 1, 2008 through December 31, 2008. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal drinking water standards. We continually strive to adopt new and better methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

Please share with us your thoughts about the information in this report. After all, well-informed customers are our best allies.

Source Water Assessment

An assessment of the drinking water sources for the 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 California Department of Public Health Office, 50 D Street, Suite 200, Santa Rosa, California 95404 or at the CDPH Web site: www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx.

An assessment of the District's wells was performed in 2003 as required by the U.S. Environmental Protection Agency. This assessment identified the sewer collection system as the most likely source of possible contamination of the wells. Please note that no contaminants have been detected in the water supply above state primary drinking water standards; however, the drinking water sources are still considered vulnerable to activities located near them. 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 on file at the Valley of the Moon Water District office located at 19039 Bay Street, El Verano or at the CDPH Web site: www.cdph.ca.gov/certlic/drinkingwater/Pages/DWSAP.aspx.

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 Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must 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.

Community Participation

The Valley of the Moon Water District encourages and invites 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 meets on the first Tuesday of each month beginning at 6:30 p.m. at the District's office located at 19039 Bay Street in El Verano.

What's Your Water Footprint?

You may have some understanding about your carbon footprint, but how much do you know about your water footprint? The water footprint of an individual, community, or business is defined as the total volume of freshwater that is used to produce the goods and services that are consumed by the individual or community or produced by the business. For example, 11 gallons of water are needed to irrigate and wash the fruit in one half-gallon container of orange juice. Thirty-seven gallons of water are used to grow, produce, package, and ship the beans in that morning cup of coffee. Two hundred and sixty-four gallons of water are required to produce one quart of milk, and 4,200 gallons of water are required to produce two pounds of beef.

According to the U.S. EPA, the average American uses about 100 gallons of water daily. In fact, in the developed world, one flush of a toilet uses as much water as the average person in the developing world allocates for an entire day's cooking, washing, cleaning, and drinking. The annual American per capita water footprint is about 8,000 cubic feet, twice the global per capita average. With water use increasing six-fold in the past century, our demands for freshwater are rapidly outstripping what the planet can replenish.

To check out your own water footprint, go to www.h2oconserve.org or visit www.waterfootprint.org to see how the water footprints of other nations compare.

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.

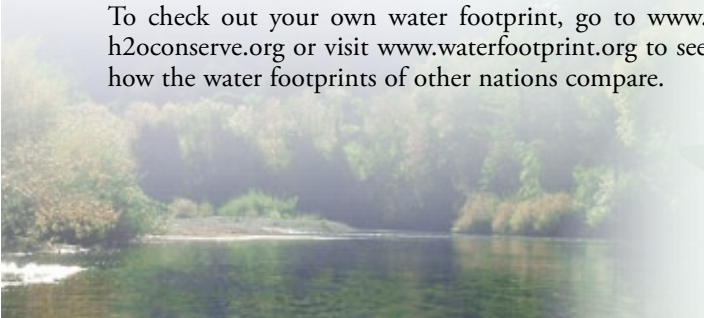
“WELL-INFORMED CUSTOMERS ARE OUR BEST ALLIES.”

Lead and Drinking Water

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 your home's plumbing. We are 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 the water for drinking or cooking. 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.

Questions?

For more information about this report or for any questions relating to your drinking water, please contact Paul Gradolph, Operations and Maintenance Supervisor, at (707) 996-1037.



Where Does My Water Come From?

One of the most important factors in water quality is its source: The purer the source, the better the water. The Valley of the Moon Water District's customers are fortunate because they enjoy a reliable water supply from two sources. The District's primary source is purchased water from the Sonoma County Water Agency (Water Agency). In 2008, the Water Agency's water originated from six Ranney Collectors (or caissons), seven production wells along the Russian River, and, to a minor degree, from three wells in the Santa Rosa plain. One of the Water Agency's Ranney Collectors, referred to as Caisson 5, is the only source among these wells that is subject to surface water treatment regulations, and this is only when high flow conditions exist in the Russian River.

The Russian River originates in central Mendocino County, approximately 15 miles north of the city of Ukiah. The main channel of the Russian River is 110 miles long and flows southward from its headwaters near Potter Valley to the Pacific Ocean near Jenner, about 20 miles west of the city of Santa Rosa. Three main reservoirs, Lake Sonoma, Lake Pillsbury, and Lake Mendocino, feed the Russian River, replenishing the aquifer. Ranney Collectors withdraw water from about 40 to 60 feet below the Russian River streambed. Streambeds beneath the Russian River provide the required filtration. The Water Agency uses chlorine in the form of chlorine gas to treat the water for bacterial disinfection and to a lesser extent, sodium hypochlorite and sodium hydroxide (also known as caustic soda) to adjust the pH before it is delivered to the District. There is no additional treatment within the District's system. In addition to the Valley of the Moon Water District, the Water Agency system supplies water to the cities of Santa Rosa, Cotati, Petaluma, Rohnert Park, and Sonoma, as well as the North Marin, Forestville, and Marin Municipal Water Districts.

Our secondary source consists of five, District groundwater wells and one leased well. The Valley of the Moon Water District uses these wells to supplement its primary source of water throughout the year. In 2008, the Valley of the Moon Water District purchased 2,905 acre feet of water from the Water Agency and produced 424 acre feet from local wells.

Once the water has been purchased or produced, it enters the District's distribution system, which includes more than 92 miles of water main, 6,840 service connections, 12 storage tanks, and 11 pumping stations. Before the water comes to your tap, the District takes many steps to ensure its quality and safety. These include carefully treating the water, sampling and monitoring, analyzing results of the sampling, and repairing pipes.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water but also can save you money by reducing your water bill. The Valley of the Moon Water District is fully committed to water conservation and has many programs in place to encourage our customers to use water wisely.

Currently, the District has a FREE program in place to help you save water and money. A Water Smart Home Program representative will visit your home to review your outdoor and indoor water use. Best of all, the Water Smart Home Program visit is at no cost to you. Call (707) 547-1910 to schedule an appointment.

Stop Those Leaks

Check your indoor appliances and devices for water leaks. Many silent leaks allow water and your money to go down the drain. Another large water waster can be leaks in your irrigation system. Fix irrigation system leaks quickly. Inspect your sprinklers and drip sprayers regularly for leaks during the daytime since the optimal time to water is in the nighttime hours when you cannot observe leaks. If you have an older irrigation system, more than 50% of the water can be lost to leaks. Use your water meter to detect hidden leaks. Simply turn off all taps and appliances that use water. Then check the meter after 15 minutes. If it moved, you have a leak.

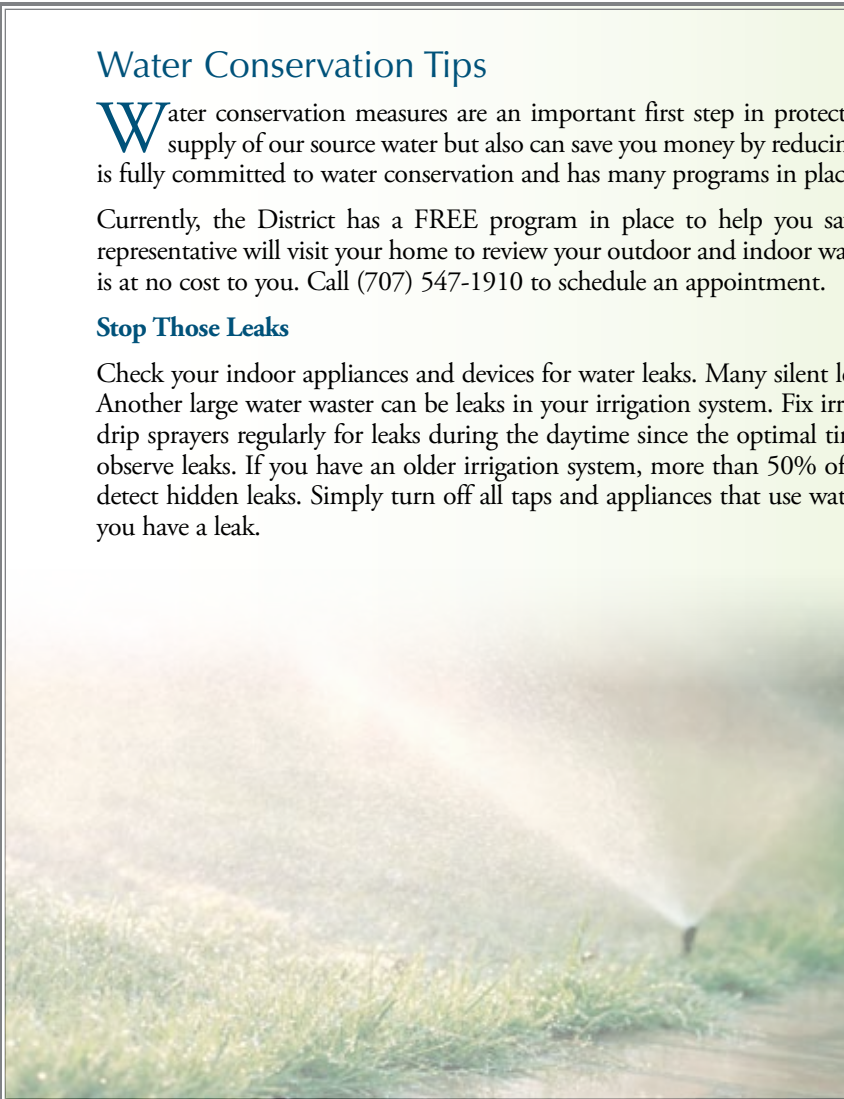
Plant water-wise plants with proper landscape design and irrigation. Whether you are putting in a new landscape or gradually changing the current landscape at your home, select plants that are appropriate for your local climate conditions. Also consider water wise plant material, a more natural landscape, or wildscape. If you are considering removing or reducing your turf grass area, contact Carrie Pollard at 547-1968 or 975-3415 to learn about current rebates that are available.

Information on other ways you can conserve water can be found at:

www.vomwd.com/conservation.html

www.scwa.ca.gov/water_conservation

www.h2ouse.org



Sampling Results

We are pleased to report that during the past year, the water delivered to your home or business complied with, or did better than, all state and federal drinking water requirements. To ensure safe drinking water, we continually monitor water quality, drawing samples from various locations throughout the water system. For your information, we have compiled the following tables showing what constituents were detected in your drinking water during 2008. Although all of the constituents listed below are under the Maximum Contaminant Level (MCL) set by the U.S. Environmental Protection Agency, we feel it is important that you know exactly what was detected and how much of the constituent was present in the water.

The state requires us to monitor 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									
				Valley of the Moon Water District		Sonoma County Water Agency			
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)	2008	10	0.004	1.5	ND–3.4	ND	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chromium (ppb)	2008	50	(100)	ND	NA	0.4	ND–2.4	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	2007	15	(0)	0.95	0.37–1.41	0.75 ¹	0.09–1.43 ¹	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2008	60	NA	0.9	ND–2.3	5.61	ND–9.11	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2008	45	45	3.9	ND–16.0	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2008	80	NA	15.0	9.9–24	16.2	8.2–25.1	No	By-product of drinking water chlorination

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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH% TILE)	SITES ABOVE AL/TOTAL SITES	TYPICAL SOURCE
Copper (ppm)	2008	1.3	0.3	0.003	0/30	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2008	15	2	0.2	0/30	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES									
				Valley of the Moon Water District		Sonoma County Water Agency			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2008	500	NS	27.8	6.2–67	4.9	4.8–5.2	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	2008	1,600	NS	303	170–390	242	230–250	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2008	500	NS	10.1	3.2–20.0	10.2	9–12	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2008	1,000	NS	238	180–270	115	110–120	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2008	5	NS	0.33	ND–0.82	0.04	0.03–0.07	No	Soil runoff
Zinc (ppm)	2008	5.0	NS	0.05	ND–0.27	2.0	ND–12	No	Runoff/leaching from natural deposits; industrial wastes

OTHER SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Valley of the Moon Water District		Sonoma County Water Agency		TYPICAL SOURCE
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	
Calcium (ppm)	2008	16.2	9.9–27.0	19.8	19–21	Erosion of natural deposits
Magnesium (ppm)	2008	8.7	5.8–15.0	12.8	12–14	Erosion of natural deposits
pH (Units)	2008	7.1	6.6–7.6	7.4	7.3–7.4	Runoff/leaching from natural deposits; industrial wastes
Sodium (ppm)	2008	31.00	16–76	7.6	7.3–7.9	Erosion of natural deposits
Total Hardness (ppm)	2008	79.8	49–140	102.3	97–110	Calcium and magnesium concentration

¹ Sampled in 2005.

Definitions

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

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

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 level of a disinfectant added for water treatment that may not be exceeded at the customers tap.

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

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).