

ANNUAL WATER QUALITY REPORT

Reporting Year 2021

Presented By



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

PWS ID#: CA5610019

We've Come a Long Way

Once again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

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.

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.

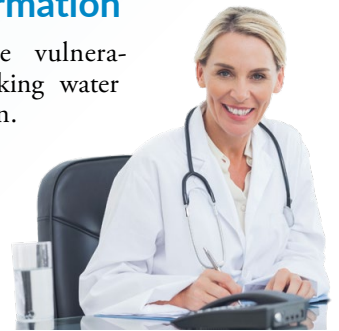
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When the well is dry, we
know the worth of water.

—Benjamin Franklin

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 water.epa.gov/drink/hotline.



QUESTIONS? For more information about this report, or for any questions relating to your drinking water, please call Lydia Salas, Administrative Specialist, at (805) 388-5373.

Where Does My Water Come From?

In 2021 City of Camarillo water customers received approximately 26 percent local groundwater pumped from the Fox Canyon Aquifer via four city wells blended with approximately 74 percent imported water from Calleguas Municipal Water District. The Camarillo wells have the ability to pump up to 8.6 million gallons per day. Calleguas provides imported water from the Northern California State Water Project and the Colorado River. Just over half of the water we receive originates in Northern California and is conveyed over 500 miles through the State Water Project's network of reservoirs, aqueducts, and pump stations. After treatment at the Metropolitan Water District Jensen Filtration Plant in the northern San Fernando Valley, the water is carried by pipeline to Ventura County, where it is distributed by Calleguas to its Ventura County water purveyors. Additional supplies of imported water are stored in Lake Bard, Calleguas's reservoir in Thousand Oaks. More information about our imported water can be found at calleguas.com/water-resources-and-quality/water-quality.asp.

Metropolitan Water District of Southern California completed a source water assessment of both the State Water Project and Colorado River supply. The State Water Project source is considered to be most vulnerable to urban and storm water runoff, wildlife, agriculture, recreation and wastewater. The Colorado River source is considered to be most vulnerable to contamination from recreation, urban and storm water runoff, watershed and wastewater. A copy of the assessment can be obtained by contacting Metropolitan at (800) 354-4420.

Community Participation

The Camarillo City Council convenes regularly at 5:00 p.m. on the second and fourth Wednesday of each month at City Hall, 601 Carmen Drive. We welcome public interest and participation in decisions affecting drinking water and encourage attendance at these meetings. Visit cityofcamarillo.org for city council agenda information.

Source Water Assessment

In October 2021, a risk and resilience assessment of the City of Camarillo's four groundwater wells was conducted. The sources have been determined to be vulnerable to contaminants associated with agricultural drainage and irrigation wells, discharges permitted by the National Pollutant Discharge Elimination System, storm drains and sewer collection systems, and gas stations and dry cleaners. Although no contaminants from these activities were detected in the water produced by these wells, the wells are still considered vulnerable to these nearby activities. A copy of the complete assessment report is available by contacting the City of Camarillo Water Division at (805) 388-5373.

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.

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											
				City of Camarillo Well Water 26%	Purchased Water from Calleguas MWD Jensen Plant 63%		Purchased Water from Locally Stored Surface Water Treated by Calleguas 11%				
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	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2021	1	0.6	ND	ND -	0.064	ND-0.12	0.15	ND-0.24	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2020, 2021	10	0.004	0.5	ND-2	ND	ND -	ND	ND -	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2021	1	2	ND	ND -	ND	ND -	0.11	0.11 -	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2021	10	0.1	NA	NA	4.5 ¹	1.2-9.8	ND	ND-7	No	By-product of drinking water disinfection
Combined Filter Effluent Turbidity (Highest single value)	2021	TT	NA	NA	NA	.06	NA	.03	NA	No	Soil runoff
Combined Filter Effluent Turbidity	2021	TT = % of samples ≤0.3 NTU	NA	NA	NA	100%	NA	100%	NA	No	Soil runoff
Fluoride (ppm)	2020, 2021	2.0	1	0.2	0.1 - 0.2	System-wide: Highest RAA = 0.7; Range = .7-1.0			No	Water additive that promotes strong teeth	
Gross Alpha Particle Activity (pCi/L)	2019, 2020	15	(0)	4.4	0.7-9.7	ND	ND -	ND	ND -	No	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2021	50 ³	(0)	NA	NA	ND	ND -	5	4-6	No	Decay of natural and human-made deposits
Haloacetic Acids (ppm)	2021	60	NA	LRAA = 17.8	3-12	System-wide: Highest RAA = 8.3; Range = 3.0 - 14.0			No	By-product of drinking water disinfection	
Nitrate [as nitrogen] (ppm)	2021	10	10	ND	ND -	ND	ND -	ND	ND -	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2021	50	30	4.8	ND-19	ND	ND -	ND	ND -	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)

The City of Camarillo does not treat groundwater with fluoride; however, the MWD treats its water by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.7 - 1.3 ppm, as required by the State Water Resources Control Board.

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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	VIOLATION	TYPICAL SOURCE
Total Chlorine Residual (ppm)	2020	[4.0]	[4.0]	HRAA= 1.25	1.04–1.43	System-wide: Highest RAA = 2.3; Range = 1.7- 2.6			No	Disinfectant added for treatment	
TTHMs [Total Trihalomethanes]– Stage 2 (ppm)	2021	80	NA	LRAA = 21	9-27	System-wide: Highest RAA = 19.8; Range = 12.0 - 28.0			No	By-product of water disinfection	
Uranium (pCi/L)	2020, 2021	20	0.43	2.4	0.2–4.6	ND ⁴	ND–3 ⁴	2 ⁴	1–3 ⁴	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)	2019	1.3	0.3	0.40	0/36	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2019	15	0.2	5.7	0/36	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				City of Camarillo Well Water 26%	Purchased Water from Calleguas MWD Jensen Plant 63%		Purchased Water from Locally Stored Surface Water Treated by Calleguas 11%				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2021	200	NS	ND	ND -	64	ND–120	150	ND–240	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2020, 2021	500	NS	82.1	66–116	72	65–80	96	95–97	No	Runoff/leaching from natural deposits; seawater influence
Color (units)	2020, 2021	15	NS	1.2	ND–5	2	1–2	1	1 -	No	Naturally occurring organic materials
Corrosivity⁵ (units)	2020, 2021	Non-corrosive	NS	12.5	12.3–12.7	12.2	12.2 -	12.4	12.4–12.5	No	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water affected by temperature and other factors
Foaming Agents [MBAS] (ppb)	2020, 2021	500	NS	ND	ND -	ND	ND -	ND	ND -	No	Municipal and industrial waste discharges
Iron (ppb)	2021	300	NS	294.7 ⁶	ND–460 ⁶	ND	ND -	ND	ND -	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2021	50	NS	37.8 ⁶	20–80 ⁶	ND	ND -	ND	ND -	No	Leaching from natural deposits
Odor, Threshold (Units)	2020, 2021	3	NS	1	1 -	2 ²	2 - ²	ND ²	ND - ²	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2020, 2021	1,600	NS	1,627.5 ⁷	1,170–2,120 ⁷	558	519–598	964	962–965	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2021	500	NS	153.9 ⁶	50.2–268 ⁶	66	61–72	219	217–221	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2021	1,000	NS	495.6	ND–790	300	298–302	604	599–609	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2020, 2021	5	NS	0.2	0.1–0.9	ND	ND -	ND	ND -	No	Soil runoff

UNREGULATED SUBSTANCES⁸

		City of Camarillo Well Water 26%		Purchased Water from Calleguas MWD Jensen Plant 63%		Purchased Water from Locally Stored Surface Water Treated by Calleguas 11%	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Boron (ppb)	2020, 2021	500	300–700	180	180 -	130	130 -
Sodium (ppm)	2020, 2021	143	94–186	64	61–68	98	95–101
Vanadium (ppb)	2021	NA	NA	ND	ND -	ND	ND -

OTHER UNREGULATED SUBSTANCES⁸

		City of Camarillo Well Water 26%		Purchased Water from Calleguas MWD Jensen Plant 63%		Purchased Water from Locally Stored Surface Water Treated by Calleguas 11%	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	2020, 2021	227.5	210–250	92	86–97	126	123–128
Bicarbonate (ppm)	2020, 2021	277.5	260–300	NA	NA	NA	NA
Calcium (ppm)	2020, 2021	57.4	24–97.6	30	27–32	67	64–70
Chlorate (ppb)	2019	4	4 -	88	88 -	55	55 -
Hardness, Total (ppm)	2020, 2021	217.6	101–350	122	110–133	272	270–273
Magnesium (ppm)	2020, 2021	18	10–26	12	12–13	26	25–26
Manganese (ppb)	2021	37.8	20–80	NA	NA	NA	NA
pH (units)	2020, 2021	7.5	7.3–7.8	8.3	8.3–8.4	8.1	8.1–8.2
Potassium (ppm)	2020, 2021	4.8	4–6	2.7	2.6–2.7	4.6	4.4–4.7
Total Organic Carbon (ppm)	2021	NA	NA	1.7	1.1–2	2.3	1.8–2.5
Vanadium (ppb)	2021	ND	ND -	ND	ND -	ND	ND -

¹ Compliance for treatment plants that use ozone is based on a running annual average of monthly samples.

² Sampled in 2020.

³ The State Board considers 50 pCi/L to be the level of concern for beta particles.

⁴ Sampled in 2021.

⁵ Measures the aggressiveness of water transported through pipes. Water <10 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. Measurements >12 indicate nonaggressive water and between 10 and 11.9 indicate moderately aggressive water.

⁶ Results shown are from groundwater blended with Calleguas water to bring it into compliance. Raw groundwater samples alone exceeded the SMCL, which was set to protect against unpleasant aesthetic effects such as taste, odor, or staining of fixtures and clothing during laundering.

⁷ Specific conductance exceeded the SMCL. The City of Camarillo is constructing a water treatment plant to improve the overall quality of the groundwater pumped from the Fox Canyon Aquifer. The treatment plant is scheduled to be completed late-2022.

⁸ Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

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.