

ANNUAL WATER QUALITY REPORT

REPORTING YEAR 2020

Presented By





Quality First

Once again, we are pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2020. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education, while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies.

Where Does My Water Come From?

In 2020, City of Camarillo Water customers received approximately 43% local groundwater pumped from the Fox Canyon Aquifer via four city wells, blended with approximately 57% imported water from Calleguas Municipal Water District (Calleguas). 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 from 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 the imported water are stored in Lake Bard, Calleguas' reservoir in Thousand Oaks. More information about our imported water can be found here: www.calleguas.com/water-resources-and-quality/water-quality.asp.



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We remain vigilant in
delivering the best-quality
drinking water
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Source Water Assessment

In May 2004, a Source Water Vulnerability Assessment of the City of Camarillo's three groundwater wells was conducted. A fourth well located at the Camarillo Airport was added to our water system after this assessment was conducted. The sources have been determined to be vulnerable to contaminants associated with agricultural drainage and irrigation wells, with discharges permitted by the National Pollutant Discharge Elimination System, with storm drains and sewer collection systems, and with gas stations and dry cleaners. Although no contaminants from these activities were detected in the water produced by these wells, they are still considered vulnerable to these nearby activities. A copy of the complete assessment is available by contacting the City of Camarillo Water Division at (805) 388-5373.

Community Participation

The Camarillo City Council convenes regularly at 5 p.m. on the second and fourth Wednesdays 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 our website at www.cityofcamarillo.org for City Council agenda information.

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>.



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 storm-water 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 storm-water 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 storm-water 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 2 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 at www.epa.gov/safewater/lead.



QUESTIONS? For more information about this report, or for any questions related to your drinking water, please call Lydia Salas, Administrative Specialist, 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

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	City of Camarillo Well Water 43%		Purchased Water from Calleguas MWD Jensen Plant 56%		Purchased Water from Locally Stored Surface Water Treated by Calleguas 1%		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppm)	2019	1	0.6	ND	NA	0.1 ¹	ND–0.2 ¹	ND	NA	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2019, 2020	10	0.004	ND	ND–2	ND ¹	NA ¹	ND ¹	ND–2.0 ¹	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Bromate (ppb)	2020	10	0.1	NA	NA	4.4 ²	1.4–6.0	ND	NA	No	By-product of drinking water disinfection
Combined Filter Effluent Turbidity (Highest single value)	2019	TT	NA	NA	NA	.04	NA	.06	NA	No	Soil runoff
Combined Filter Effluent Turbidity (Lowest monthly percent of samples meeting the limit)	2019	TT = % of samples ≤0.3 NTU	NA	NA	NA	100%	NA	100%	NA	No	Soil runoff
Fluoride (ppm)	2019, 2020	2.0	1	0.2	0.1–0.2	System-wide: Highest RAA = 0.7; Range = 0.6–0.9			No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
Gross Alpha Particle Activity (pCi/L)	2019, 2020	15	(0)	9.7	ND–11	ND ¹	NA ¹	4.6 ¹	4.0–5.2 ¹	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2020	60	NA	LRAA = 17.8	3–12	NA	NA	NA	NA	No	By-product of drinking water disinfection
Nitrate [as nitrogen] (ppm)	2020	10	10	ND	NA	0.5 ³	0.5–0.5 ³	ND ³	NA ³	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2019	50	30	5	ND–5	ND	NA	10	10–10	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Total Chlorine Residual (ppm)	2020	[4.0]	[4.0]	HRAA= 1.25	1.04–1.43	NA	NA	NA	NA	No	Drinking water disinfectant added for treatment
TTHMs [Total Trihalomethanes] (ppb)	2020	80	NA	LRAA= 21	9–27	NA	NA	NA	NA	No	By-product of drinking water disinfection
Uranium (pCi/L)	2019, 2020	20	0.43	0.22	ND–0.22	ND ¹	ND–3.0 ¹	1.7 ¹	1.1–2.2 ¹	No	Erosion of natural deposits

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.

Tap Water Samples Collected for Copper and Lead 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 43%	Purchased Water from Calleguas MWD Jensen Plant 56%	Purchased Water from Locally Stored Surface Water Treated by Calleguas 1%				
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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)	2019, 2020	200	NS	ND	NA	116 ¹	ND–220 ¹	ND ¹	NA ¹	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2019, 2020	500	NS	161 ³	ND–161 ³	52 ¹	51–54 ¹	98 ¹	96–100 ¹	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2019, 2020	15	NS	2.1 ³	ND–5 ³	2 ¹	1–3 ¹	ND ¹	NA ¹	No	Naturally-occurring organic materials
Corrosivity ⁴ (Units)	2019, 2020	Non-corrosive	NS	12.2 ³	12.1–12.4 ³	12.1 ¹	12.1–12.2 ¹	12.3 ¹	12.3–12.3 ¹	No	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Foaming Agents [MBAS] (ppb)	2019, 2020	500	NS	0.07 ³	0.05–1 ³	ND ¹	NA ¹	ND ¹	NA ¹	No	Municipal and industrial waste discharges
Iron (ppb)	2020	300	NS	153.3	ND–460	ND ³	NA ³	ND ³	NA ³	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2020	50	NS	49.2	20–80	ND ³	NA ³	ND ³	NA ³	No	Leaching from natural deposits
Odor–Threshold (Units)	2019, 2020	3	NS	1	1–1	2 ¹	2–2 ¹	ND ¹	NA ¹	No	Naturally-occurring organic materials
Specific Conductance (µS/cm)	2019, 2020	1,600	NS	1570	1170–1970	460 ¹	451–468 ¹	735 ¹	729–740 ¹	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2020	500	NS	286.3	120–335	54	53–56	85.1	76.9–93.3	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2020	1,000	NS	771.8	710–900	260	255–264	380	360–400	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2019, 2020	5	NS	0.38	0.1–0.9	ND ³	NA ³	ND ³	NA ³	No	Soil runoff

UNREGULATED AND OTHER SUBSTANCES ⁵

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	City of Camarillo Well Water 43%		Purchased Water from Calleguas MWD Jensen Plant 56%		Purchased Water from Locally Stored Surface Water Treated by Calleguas 1%	
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	2019, 2020	308	267–333	82 ¹	79–86 ¹	110 ¹	110–110 ¹
Bicarbonate (ppm)	2019, 2020	280 ¹	218–300 ¹	NA	NA	NA	NA
Boron (ppm)	2019, 2020	450	300–600	0.2 ¹	0.2–0.2 ¹	0.2 ¹	0.2–0.2 ¹
Calcium (ppm)	2019, 2020	84	72–90	26	25–27	35	34–35
Chlorate (ppb)	2020	4	4–4	27	27–27	NA	NA
Hardness [Total Hardness] (ppm)	2020	316	148–374	108	107–110	154	153–155
Magnesium (ppm)	2019, 2020	39.5	29–50	12 ¹	11–12 ¹	17 ¹	16–17 ¹
Manganese (ppb)	2020	40	20–80	NA	NA	NA	NA
pH (Units)	2019, 2020	7.4	7.3–7.5	8.4	8.4–8.4	8.3	8.3–8.3
Potassium (ppm)	2018, 2020	NA	NA	2.6 ¹	2.5–2.6 ¹	4.0 ¹	4.0–4.0 ¹
Sodium (ppm)	2019, 2020	132	94–170	47 ¹	46–48 ¹	84 ¹	83–85 ¹
Total Organic Carbon [TOC] (ppm)	2020	NA	NA	2.2	1.8–2.3	1.5	1.3–1.6

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).

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.

¹ Sampled in 2020.

² Compliance for treatment plants that use ozone is based on a running annual average of monthly samples.

³ Sampled in 2019.

⁴ Measures the aggressiveness of water transported through pipes. Water with <10 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. Measurements >12 indicate non-aggressive water, and between 10.0 and 11.9 indicates moderately aggressive water.

⁵ Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.