CALLEGUAS

MUNICIPAL WATER DISTRICT

July 2020

Annual Water Quality Report

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

Water Quality Is Our Priority

Water quality continues to be a priority for Calleguas Municipal Water District. Our mission since the 1950s has been to provide our service area with a reliable supply of high quality, imported drinking water. A team of highly trained professionals works hard to ensure Calleguas' water supply meets all State and Federal water quality standards. This brochure provides information about the sources and quality of the water delivered by Calleguas in 2019. Included are details about where your water comes from, what it contains, and how it compares to State and Federal standards.

During the year, multiple tests for over 150 drinking water contaminants were performed on Calleguas' water supply to determine concentrations of mineral, physical, bacteriological, inorganic, organic, and radioactive constituents.

Once again, we are proud to report our system did not violate any water quality standards. For additional information on the quality of water delivered by Calleguas, please contact Amy Mueller at (805) 579-7117 or by email at amueller@calleguas.com. You can also visit our website at www.calleguas.com.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

Our Mission:

To provide the service area with a reliable supplemental supply of regional and locally developed water in an environmentally and economically responsible manner.

Our Source Water

Calleguas' primary drinking water supply is obtained from the Feather River Watershed, located in the northern Sierras, and conveyed through the State Water Project. Colorado River water serves as a secondary supply source for the District and is transported through Metropolitan Water District's Colorado River Aqueduct.

Originating in northern California, State Water Project deliveries are conveyed over 500 miles through a network of reservoirs, aqueducts, and pump stations. The State Water Project supply is filtered and disinfected at Metropolitan's Joseph Jensen Filtration Plant in Granada Hills.

The Colorado River Aqueduct has been the backbone of Southern California's imported water supply for more than 70 years. Built and operated by Metropolitan, the 242-mile aqueduct delivers water from the Colorado River at Lake Havasu along the California/Arizona border. The Colorado River supply is filtered and disinfected at Metropolitan's F.E. Weymouth Treatment Plant in the City of La Verne.

Metropolitan Water District of Southern California has 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 stormwater runoff, increasing urbanization in the watershed, and wastewater. A copy of this assessment can be obtained by contacting Metropolitan at (213) 217-6850.

Following treatment at the Jensen and Weymouth Plants, water is conveyed by pipeline through the San Fernando Valley to Calleguas' mile-long tunnel in the Santa Susana Mountains. While the Weymouth Filtration Plant employs similar treatment technology to the Jensen Filtration Plant, water quality of Colorado River supplies varies from that of State Project supplies. Information on the quality of the treated water can found on the attached water quality tables.

The water is then distributed by Calleguas and its purveyors to an estimated 635,000 Ventura County residents, representing 75% of the County's population. Surplus supplies of imported water are stored in Lake Bard, the District's surface water reservoir near the City of Thousand Oaks, and the Las Posas groundwater basin underlying the City of Moorpark and surrounding area. Through the Las Posas Aquifer Storage and Recovery (ASR) project, Calleguas stores water for later use during Metropolitan system shutdowns and emergencies.

Visit www.calleguas.com for more information on the Las Posas ASR project and other Calleguas water supply reliability programs.

General Information About Source 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.

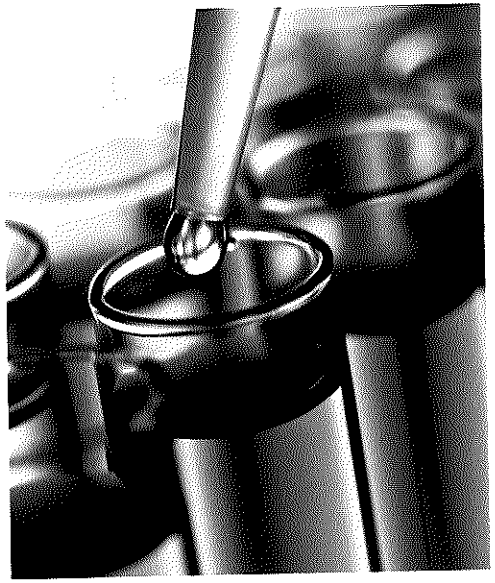
Contaminants that may be present in source water before we treat it include:

- *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 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants* that can be naturally-occurring or be the result of oil and gas production and mining activities.

Our Treated Water

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the Division of Drinking Water prescribe regulations which 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.

Calleguas achieves these standards through vigilant watershed protection and treatment techniques used at Metropolitan's Jensen and Weymouth Plants as well as Calleguas' Lake Bard Water Filtration Plant. A good indicator of the effectiveness of our filtration system is the measurement of turbidity. Turbidity, or the cloudiness of water, is listed in the tables included in this report.



Water Quality Data

The following tables list all the drinking water contaminants that we detected during the 2019 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in these tables is from testing done January 1 through December 31, 2019. The State requires that we monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of water quality, is more than one year old.

CALLEGUAS MUNICIPAL WATER DISTRICT

Summary of Water Quality Results for 2019

			Imported Surface Water Treated at Metropolitan's Jensen Plant		Locally Stored Surface Water Treated by Calleguas		
	Percent of Supply		*97%*		*3%*		
Parameter	MCL [MRDL]	PHG (MCLG) [MRDLG]	Average	Range	Average	Range	Major Sources in Drinking Water
PRIMARY DRINKING WATER STANDARDS - Mandatory Health-Related Standards							
CLARITY *(a)*							
Turbidity (NTU) (TT)	Highest Single Value		0.06		0.06		Soil runoff
	% of samples ≤ 0.3 NTU		100%		100%		
MICROBIOLOGICAL *(b)*							
Total Coliform Bacteria (State Total Coliform Rule)	> 1	(0)	ND	ND	ND	ND – 1	Naturally present in the environment
DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS							
Bromate (ppb) *(c)*	10	0.1	5.6	1.6 – 8.4	1.7	ND – 5.2	By-product of drinking water disinfection
Haloacetic Acids (ppb) *(d)*	60	n/a	Highest LRAA = 12.3, Range = 2.0 – 21.0				By-product of drinking water disinfection
Total Chlorine Residual (ppm)	[4]	[4]	Highest Running Annual Average = 2.3, Range = 1.3 – 2.5				Drinking water disinfectant added for treatment
Total Trihalomethanes (ppb) *(d)*	80	n/a	Highest LRAA = 24.3, Range = 14.0 – 41.0				By-product of drinking water disinfection
INORGANIC CHEMICALS							
Aluminum (ppb)	1,000	600	58	ND – 290	ND	ND	Erosion of natural deposits, residual from water treatment process
Arsenic (ppb)	10	0.004	ND	ND	3.5	3.0 – 4.0	Erosion of natural deposits, runoff from orchards
Fluoride - Distribution System (ppm) *(e)*	2.0	1.0	Highest Running Annual Average = 0.7, Range = 0.7 – 1.1				Water additive that promotes strong teeth
Nitrate (as N) (ppm)	10	10	0.5	0.5	ND	ND	Runoff & leaching from fertilizer & sewage
Selenium (ppb)	50	30	ND	ND	10	6 – 14	Erosion of natural deposits; discharge from refineries
RADIOLOGICALS *(f)*							
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND	ND – 3.0	3.5	3.1 – 3.9	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	ND	ND – 1.0	ND	ND – 2.7	Erosion of natural deposits

ABBREVIATIONS, DEFINITIONS, and NOTES

LRAA = Locational Running Annual Average
n/a = not applicable
ND = None Detected
NTU = Nephelometric Turbidity Units
ppm = parts per million, or milligrams per liter (mg/L)
ppb = parts per billion, or micrograms per liter (µg/L)
pCi/L = PicoCuries per Liter

Maximum Contaminant Level (MCL) = 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.

Maximum Contaminant Level Goal (MCLG) = 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. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) = 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 pathogens.

Maximum Residual Disinfectant Level Goal (MRDLG) = 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.

Public Health Goal (PHG) = 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 Environmental Protection Agency.

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

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

(a) The turbidity level of filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time.

(b) Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. No more than 1 monthly sample may be total coliform positive. This MCL was not violated in 2019.

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

(d) Compliance is based on the LRAA of data collected at distribution system-wide monitoring locations. The range of all samples collected is included.

(e) The Metropolitan Water District (MWD) treats their 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 0.6 – 1.2 ppm, as required by State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW).

(f) MWD collects four consecutive quarters of radiological monitoring triennially. MWD data is from 2017. Calleguas conducts radiological monitoring annually.

CALLEGUAS MUNICIPAL WATER DISTRICT

Summary of Water Quality Results for 2019

			Imported Surface Water Treated at Metropolitan's Jensen Plant		Locally Stored Surface Water Treated by Calleguas		
	Percent of Supply		*97%*		*3%*		
Parameter	Secondary MCL	Notification Level	Average	Range	Average	Range	Major Sources in Drinking Water
SECONDARY DRINKING WATER STANDARDS—Aesthetic Standards							
Aluminum (ppb) *(a)*	200		58	ND – 290	ND	ND	Erosion of natural deposits, residual from water treatment process
Chloride (ppm)	500		62	62	100	99 – 101	Runoff and leaching from natural deposits; seawater influence
Color (Units)	15		2	1 – 2	ND	ND	Naturally-occurring organic materials
Odor Threshold (Units)	3		ND	ND – 1	ND	ND	Naturally-occurring organic materials
Specific Conductance (µS/cm)	1,600		488	471 – 505	742	726 – 758	Substances that form ions when in water, seawater influence
Sulfate (ppm)	500		59.0	56.0 – 62.0	88.7	84.5 – 92.9	Runoff and leaching from natural deposits
Total Dissolved Solids (ppm)	1,000		283	280 – 286	430	430	Runoff and leaching from natural deposits
ADDITIONAL PARAMETERS (Unregulated)							
Alkalinity (ppm)	NS	NS	82	80 – 84	105	100 – 110	
Boron (ppm)	NS	1	0.2	0.2	0.2	0.2	
Calcium (ppm)	NS	NS	27	26 – 28	31	30 – 32	
Corrosivity (AI) *(b)*	NS	NS	12.2	12.1 – 12.3	12.1	12.0 – 12.1	
Hardness (Total Hardness) (ppm)	NS	NS	114	112 – 117	137	132 – 142	
Magnesium (ppm)	NS	NS	12	12 – 13	14	14 – 15	
pH (pH Units)	NS	NS	8.4	8.4 – 8.5	8.2	8.1 – 8.2	
Potassium (ppm)	NS	NS	2.7	2.7	3.0	3.0	
Sodium (ppm)	NS	NS	52	51 – 54	82	79 – 84	
Total Organic Carbon (ppm)	NS	NS	2.3	2.0 – 2.5	1.5	1.2 – 1.8	
Perfluorohexanoic Acid (PFHxA)	NS	NS	26	26	(c)	(c)	

ABBREVIATIONS, DEFINITIONS, and NOTES

AI = Aggressive Index

ND = None Detected

NS = No Standard

ppm = parts per million, or milligrams per liter (mg/L)

ppb = parts per billion, or micrograms per liter (µg/L)

µS/cm = microSiemen/centimeter

Secondary Maximum Contaminant Level (MCL) = Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Notification Level = The level at which notification of the public water system's governing body is required.

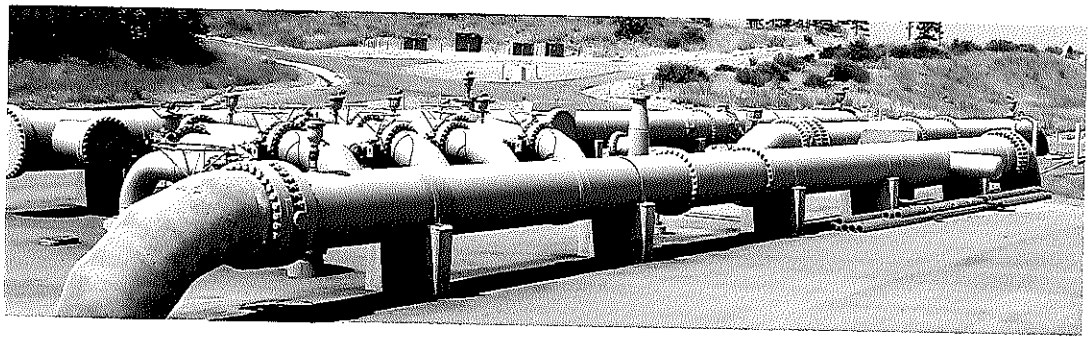
(a) Aluminum has both primary and secondary standards. Compliance with the MCL is based on a running annual average. No secondary standard MCL exceedance occurred in the Jensen treatment plant effluent.

(b) AI measures the aggressiveness of water transported through pipes. Water with AI <10.0 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. AI ≥12.0 indicates non-aggressive water. AI between 10.0 and 11.9 indicates moderately aggressive water.

(c) Calleguas did not sample for Perfluoroalkyl and Polyfluoroalkyl Substances in 2019. MWD data are from two analytical methods based on EPA 537.1 and a research method for 18 different PFAS.

Information for Customers with Special Water Needs

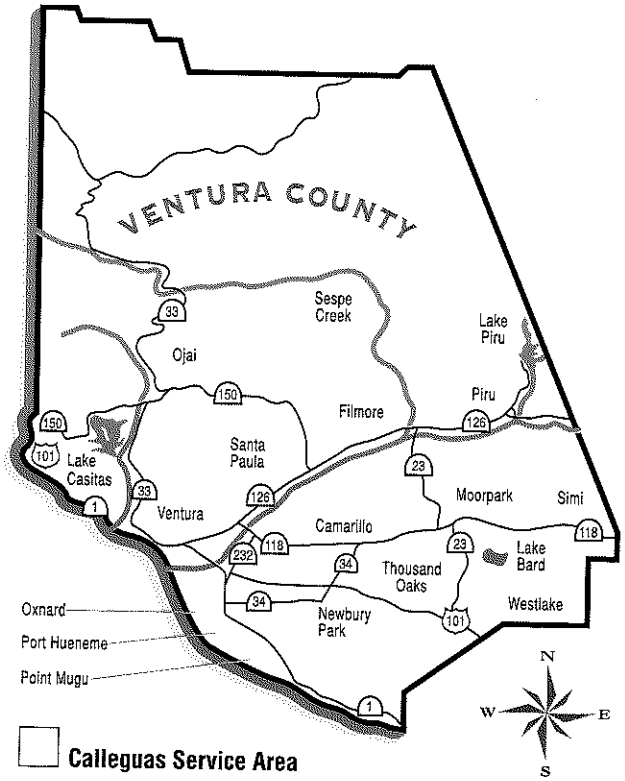
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (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 (1-800-426-4791).



Constituents Tested for and Not Detected

In addition to the information provided in the Summary of Water Quality Results, Calleguas also monitored for, but did not detect, many other contaminants during 2019. Some of those contaminants were:

Antimony	Foaming Agents	Pesticides	Tritium
Asbestos	Herbicides	Radium 226	Volatile Organic
Beryllium	Lead	Radium 228	Chemicals (VOCs)
Cadmium	Mercury	Silver	Zinc
Chromium 6	MTBE	Strontium-90	
Copper	Nitrite	Thallium	
Cyanide	Perchlorate	Total Chromium	



Information on Lead in Household 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. Your local utility 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 2 minutes before using 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 or at http://www.epa.gov/safewater/lead.

Drinking Water Fluoridation

In 2007, Calleguas' wholesale water provider, Metropolitan Water District of Southern California, joined a majority of the nation's public water suppliers in systematically adding fluoride to drinking water at each of the five water treatment plants in order to help prevent tooth decay.

In line with recommendations from the Division of Drinking Water, as well as the U.S. Centers for Disease Control and Prevention, Metropolitan adjusted the natural fluoride level in the water, which ranges from 0.1 to 0.4 parts per million, to the optimal range for dental health of 0.7 parts per million. Fluoride levels in drinking water are limited under California state regulations at a maximum dosage of 2 parts per million.

Fluoride has been added to U.S. drinking water supplies since 1945. Of the 50 largest cities in the U.S, 43 fluoridate their drinking water.

For more information about the benefits of drinking water fluoridation, please visit the following websites: The American Dental Association at http://www.ada.org/fluoride.aspx and U.S. Centers for Disease Control and Prevention at http://www.cdc.gov/fluoridation/fact_sheets/cwf_qa.htm

Information on Radon

Water suppliers are required to provide information on the presence of radon in water sources. A known human carcinogen, radon is a radioactive gas that one cannot see, taste, or smell. Commonly found in soils throughout the United States, breathing air containing radon may lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. Radon can seep up through the ground and into homes and other structures through cracks and holes in foundations. Over time, concentrations of the gas can increase to high levels potentially exposing inhabitants to greater health risks. It is possible that radon can also be released from tap water when used for showering, washing dishes, and other household activities. However, the concentration of radon released through tap water is in most cases assumed to be considerably lower than concentrations entering a home from underlying ground. If you are concerned about radon, you are advised to test the air in your home. Testing is inexpensive and easy. The EPA recommends taking measures to reduce radon levels in your home if concentrations are 4 PicoCuries per liter of air (pCi/L) or higher. For additional information, call your State radon program (1-800-745-7236), the EPA Safe Drinking Water Act Hotline at (1-800-426-4791), or call the National Safe Council Radon Hotline (1-800-SOS-RADON).

Water Conservation

Calleguas makes water conservation a priority and has long offered rebate programs for water conservation devices. Over the years, water saving technologies have advanced in both quality and effectiveness and these advancements have increased the number of rebate offerings.

Resource Links for Conservation

Education: http://www.mwdh2o.com/inthecommunity/education-programs

Rebates (SoCal WaterSmart): http://socalwatersmart.com

Community Partnering Program:
http://www.mwdh2o.com/inthecommunity/community-outreach/Pages/default.aspx

Regional Conservation Program: http://www.bewaterwise.com

California Native Plant Society: http://www.cnps.org

Gardening Classes: http://www.bewaterwise.com/classes.html

More Information on Water Quality

Calleguas Municipal Water District
2100 Olsen Road • Thousand Oaks, CA 91360-6800
(805) 526-9323
http://www.calleguas.com

Metropolitan Water District of Southern California
Public Affairs • P.O. Box 54153 • Los Angeles, CA 90054-0153
(800) CALL MWD
www.mwdh2o.com

State Water Resources Control Board
Division of Drinking Water • 601 North 7th Street • Sacramento, CA 94234-7320
http://www.waterboards.ca.gov/drinking_water/programs

U.S. Environmental Protection Agency (WH-550)
Office of Ground Water & Drinking Water
401 M. Street, S.W. • Washington, D.C. 20460
Safe Drinking Water Hotline (800) 426-4791
http://water.epa.gov/drink/index.cfm

The Calleguas Municipal Water District Board of Directors meets on the first and third Wednesday of each month at 5:00 pm at the District's administration building, 2100 Olsen Road in Thousand Oaks. The public is welcome to attend these meetings.

CALLEGUAS

MUNICIPAL WATER DISTRICT

Thomas L. Stetson, President

Andrew Santelmann, Vice President

Andy Waters, Secretary

Scott S. Quady, Treasurer

Steve Blois, Director

Anthony Goff, General Manager

bewaterwise.com