

SOLANO VERDE MUTUAL WATER COMPANY

Annual Water Quality Report June 2021

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

Water Quality as a Priority

Water quality is a priority for Solano Verde. Our mission since 1984 has been to provide our service area with a reliable supply of high quality locally produced and imported drinking water. The Staff of Solano Verde works diligently to ensure that Solano's water supply meets all state and federal water quality standards. This report provides information about the sources and quality of water delivered by Solano Verde in 2020. 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 Solano Verde's water supply to determine concentrations of mineral, physical, bacteriological, inorganic, organic, and radioactive constituents. **Once again, we are proud to report that our system met or exceeded all primary water quality standards.** For additional information about the quality of water delivered by Solano Verde, please contact Robert Eranio at (805) 732-0495.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, including mineral and microscopic organic material. The presence of contaminants does not necessarily indicate that 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 (800) 426-4791.

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, which 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*, which 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, and septic systems.
- ✓ *Radioactive contaminants* which can be naturally-occurring or be the result of oil and gas production and mining activities.

Our Source Water

Solano Verde also received 100% of our water supply during 2020 from the *Metropolitan Municipal Water District of Southern California (MWDSC)* through the *Calleguas Municipal Water District (CMWD)*. The MWDSC water supply contains about 2.0 parts per million chloramines as a disinfectant, instead of chlorine. This disinfectant has some advantages as compared to chlorine, such as fewer odors, better taste, and a reduction in the formation of carcinogenic trihalomethanes.

Originating in northern California, Calleguas' drinking water supply is conveyed over five hundred miles through the State Water Project's network of reservoirs, aqueducts, and pump stations. In December 2002, Metropolitan Water District of Southern California completed a source water assessment of its State Water Project supply. This source is considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting Metropolitan by phone at (213) 217-6850. The State Water Project supply is filtered and disinfected at the Metropolitan's Jensen Filtration Facility in Granada Hills. Following treatment, water is conveyed by pipeline through the San Fernando Valley to Calleguas' mile-long tunnel in the Santa Susana Mountains. The water is then distributed by Calleguas and its purveyors to over one-half million Ventura County residents, representing 80% of the County's population. Surplus supplies of this imported water are stored in Lake Bard in Thousand Oaks and the Las Posas Groundwater Storage facility in Moorpark.

Our Treated Water

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Solano Verde achieves these standards through vigilant watershed protection and the treatment techniques used at our water production facilities and within our water distribution system. A good indicator of the effectiveness of our well design is the measurement of turbidity. Turbidity, or the cloudiness of water, is listed in the tables included in this report.

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 persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. Environmental Protection Agency (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 (800) 426-4791.

Water Quality Data

The tables below list all the drinking water contaminants that we detected during the 2020 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, 2020. 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.

More Information on Water Quality

<p>Calleguas Municipal Water District 2100 Olsen Road Thousand Oaks, CA 91360-6800 (805) 526-9323 http://www.calleguas.com</p>	<p>State of California Department of Health Services Office of Drinking Water 601 North 7th Street Sacramento, CA 94234-7320 http://www.dhs.ca.gov/ps/ddwem/</p>
<p>Metropolitan Water District of Southern California Public Affairs P.O. Box 54153 Los Angeles, CA 90054-0153 (800) CALL MWD www.mwdh2o.com/</p>	<p>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://www.epa.gov/ogwdw/</p>

For More Information: for additional information or questions regarding this report, please contact Robert Eranio, Water System Operator, at (805) 732-0495. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled board meetings. They are usually held on the third Tuesday of each month at 6:00 pm at the home of Steve Sharpe at 6909 Solano Verde Drive.

TERMS AND ABBREVIATIONS USED IN THIS REPORT

<i>Non-Detects (ND) -</i>	Laboratory analysis indicates that the constituent is not present.
<i>Not Required (NR)-</i>	The water district is not required to collect these because samples are collected by other districts on our behalf.
<i>Parts per million (ppm) or</i> <i>Milligrams per liter (mg/l)</i>	One part per million corresponds to one minute in two years or a single penny in \$10,000.
<i>Parts per billion (ppb) or</i> <i>Micrograms per liter -</i>	One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
<i>Parts per trillion (ppt) or</i> <i>Nanograms per liter</i> <i>(nanograms/l) -</i>	One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
<i>Parts per quadrillion (ppq)</i> <i>or Picograms per liter</i> <i>(picograms/l)</i>	One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.
<i>Picocuries per liter (pCi/L)</i>	Picocuries per liter is a measure of the radioactivity in water.
<i>Millirems per year (mrem/yr)</i>	Measure of radiation absorbed by the body.
<i>Million Fibers per Liter</i> <i>(MFL)</i>	Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
<i>Nephelometric Turbidity</i> <i>Unit (NTU)</i>	Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
<i>Regulatory Action Level</i>	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
<i>Maximum Contaminant</i> <i>Level (MCL)</i>	The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
<i>Public Health Goal or PHG</i>	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.
<i>Treatment Technique (TT) -</i>	A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Solano Verde Mutual Water Company
2020 Water Quality Report to Purveyors

Parameter	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR (RL)	Range Average	MWD Jensen Plant	Solano Testing Results	Major Sources in Drinking Water
Percent of Supply						100%		

PRIMARY STANDARDS--Mandatory Health-Related Standards

CLARITY (a)								
Combined Filter Effluent Turbidity	NTU	Highest Single Value			0.04	N/A		
		TT = % of samples ≤0.3 NTU			100%	N/A		Soil runoff

MICROBIOLOGICAL								
Total Coliform Bacteria					Range	ND - 1	ND	
	Oocysts/ 200 L	TT	(0)	--	Range	TT	N/A	
<i>Cryptosporidium</i>					Average	TT	N/A	Naturally present in the environment
	Cysts/ 200 L	TT	(0)	--	Range	TT	N/A	
<i>Giardia</i>					Average	TT	N/A	Naturally present in the environment

INORGANIC CHEMICALS								
Aluminum	ppb	1,000	600	50	Range	ND - 220	ND	Erosion of natural deposits; residual from some water treatment processes
Treatment-related Fluoride (f)	ppm	2.0	1	0.1	Average	116	ND	
					Range	0.6 - 0.9	0.6 - 0.9	
					Highest RAA	0.7	0.7	Water additive that promotes strong teeth

RADIOLOGICALS (j)								
Gross Alpha Particle Activity	pCi/L	15	(0)	3	Range	4.0 - 5.2	4.0 - 5.2	Erosion of natural deposits
					Average	4.6	4.6	
Uranium	pCi/L	20	0.43	1	Range	1.1 - 2.2	1.1 - 2.2	Erosion of natural deposits
					Average	1.7	1.7	

DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS								
Total Trihalomethanes (TTHM) (l)	ppb	80	n/a	1.0	Range	11.0 - 22.0	12.3	Byproduct of drinking water disinfection
					Highest LRAA	16.3	12.3	
Haloacetic Acids (HAA5) (l)	ppb	60	n/a	1.0	Range	ND - 19.0	5	Byproduct of drinking water disinfection
					Highest LRAA	7.8	5	
Total Chlorine Residual	ppm	[4.0]	[4.0]	--	Range	1.7 - 2.6	1.7 - 2.6	Drinking water disinfectant added for treatment
					Highest RAA	2.3	2.3	
Bromate (m)	ppb	10	0.1	1.0	Range	1.4 - 6.0	1.4 - 6.0	Byproduct of drinking water disinfection
					Highest RAA	4.4	4.4	
Control of DBP Precursors as Total Organic Carbon (TOC)	ppm	TT	--	0.3	Range	1.8 - 2.3	1.8 - 2.3	Various natural and man-made sources; TOC as a medium for formation of DBPs
					Highest RAA	2.2	2.2	

SECONDARY STANDARDS--Aesthetic Standards

Aluminum	ppb	200	600	50	Range	ND - 220	ND - 220	Erosion of natural deposits; residual from some water treatment processes
					Average	116	116	
Chloride	ppm	500	--	--	Range	51 - 54	51 - 54	Runoff/leaching from natural deposits; seawater influence
					Average	52	52	
Color	Units	15	--	--	Range	1 - 3	1 - 3	Naturally occurring organic materials
					Average	2	2	
Odor Threshold	Units	3	--	1	Range	2	2	Naturally occurring organic materials
					Average	2	2	
Specific Conductance	µS/cm	1,600	--	--	Range	451 - 468	451 - 468	Substances that form ions when in water; seawater influence
					Average	460	460	
Sulfate	ppm	500	--	0.5	Range	53.0 - 56.0	53.0 - 56.0	Runoff/leaching from natural deposits;
					Average	54.0	54.0	
Total Dissolved Solids	ppm	1,000	--	--	Range	255 - 264	255 - 264	Runoff/leaching from natural deposits
					Average	260	260	
Turbidity (monthly)	NTU	5	--	0.1	Range	ND	ND	Soil runoff
					Average	ND	ND	

ADDITIONAL PARAMETERS (Unregulated)

Alkalinity	ppm	NS	--	--	Range	79 - 86	79 - 86	
					Average	82	82	
Boron	ppm	NL = 1	--	0.1	Range	0.2	0.2	
					Average	0.2	0.2	
Calcium	ppm	NS	--	--	Range	25 - 27	25 - 27	
					Average	26	26	
Chlorate	ppb	NL = 800	--	20	Range	27	27	
					Average	27	27	
Corrosivity (n)	Al	NS	--	--	Range	12.1 - 12.2	12.1 - 12.2	
					Average	12.1	12.1	
Hardness (Total Hardness)	ppm	NS	--	0.1	Range	107 - 110	107 - 110	
					Average	108	108	
Magnesium	ppm	NS	--	0.01	Range	11 - 12	11 - 12	
					Average	12	12	
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	--	Range	2	2	
					Average	2	2	
pH	pH Units	NS	--	--	Range	8.4	8.4	
					Average	8.4	8.4	
Potassium	ppm	NS	--	0.2	Range	2.5 - 2.6	2.5 - 2.6	
					Average	2.6	2.6	
Radon	pCi/L	NS	--	100.0	Range	ND	ND	
					Average	ND	ND	
Sodium	ppm	NS	--	1	Range	46 - 48	46 - 48	
					Average	47	47	

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ABBREVIATIONS AND NOTES

AI = Aggressiveness Index
 AL = Federal Regulatory Action Level
 CFU = Colony Forming Unit
 DBP = Disinfection Byproducts
 DLR = Detection Limits for Purposes of Reporting
 DDW = Division of Drinking Water
 LRAA = Locational Running Annual Average
 MBAS = Methylene Blue Active Substances
 MCL = Maximum Contaminant Level
 MCLG = Maximum Contaminant Level Goal

MFL = Million Fibers per Liter
 MRDL = Maximum Residual Disinfectant Level
 MRDLG = Maximum Residual Disinfectant Level Goal
 MWD = Metropolitan Water District
 NA = Not Applicable
 ND = Not Detected
 NL = Notification Level
 NS = No Standard
 NTU = Nephelometric Turbidity Units
 pCi/L = PicoCuries per Liter

PHG = Public Health Goal
 ppb = Parts per Billion, or Micrograms per Liter (µg/L)
 ppm = Parts per Million, or Milligrams per Liter (mg/L)
 ppq = Parts per quadrillion or picograms per liter (pg/L)
 ppt = Parts per Trillion, or Nanograms per Liter (ng/L)
 RAA = Running Annual Average
 RL = Reporting Limit
 SWRCB = State Water Resources Control Board
 TT = Treatment Technique
 uS/cm = microSiemen per centimeter

- (a) The turbidity level of the 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. Coliforms were found in more samples than allowed and this was a warning of potential problems.
- (c) Acute total coliform (*E. coli*) MCL: The occurrence of two consecutive total coliform-positive samples, one of which contains *E. coli*, constitutes an acute MCL violation. No samples were *E. coli*-positive and the MCL was not violated.
- (d) Total coliform TT trigger, Level 1 assessments, and total coliform TT violations: More than 5.0% total coliform-positive samples in a month trigger Level 1 assessments. Failure to conduct assessments and correct findings within 30 days is a total coliform violation. No triggers, Level 1 assessments, or violations occurred.
- (e) *E. coli* MCL and Level 2 TT triggers for assessments: Routine and repeat samples are total coliform-positive and either sample is *E. coli*-positive or system fails to collect all repeat samples following an *E. coli*-positive sample, or fails to test for *E. coli* when the repeat sample is total coliform positive. No samples were *E. coli*-positive. No MCL violations or no assessments occurred.
- (f) MWD data samples were collected in 2018. Calleguas collects this data annually.
- (g) 1,2,3 Trichloropropane was monitored quarterly for the initial monitoring requirements promulgated in January 2018. Annually monitoring began in 2019.
- (h) MWD data are from samples collected in 2020 and reported every year during the nine year compliance cycle. Calleguas collects asbestos samples annually.
- (i) 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, Division of Drinking Water (DDW).
- (j) MWD collects four consecutive quarters of radiological monitoring triennially. MWD data from 2020. Calleguas conducts radiological monitoring annually.
- (k) Combined Radium is the sum of radium-226 and radium-228.
- (l) Compliance was based on the LRAA of data collected at distribution system-wide monitoring locations. The range of all samples collected is included.
- (m) Compliance for treatment plants that use ozone is based on a running annual average of monthly samples.
- (n) 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 >