

# Consumer Confidence Report Certification Form

(to be submitted with a copy of the CCR)

(to certify electronic delivery of the CCR, use the certification form on the State Water Board's website at  
[http://www.swrcb.ca.gov/drinking\\_water/certlic/drinkingwater/CCR.shtml](http://www.swrcb.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml))

Water System Name:	<b>VENTURA RIVER WATER DISTRICT</b>
Water System Number:	<b>CA5610022</b>

The water system named above hereby certifies that its Consumer Confidence Report was distributed on 5-12-2023 (date) to customers (and appropriate notices of availability have been given). Further, the system certifies that the information contained in the report is correct and consistent with the compliance monitoring data previously submitted to the State Water Resources Control Board, Division of Drinking Water.

Certified By:	Name:	Bert J. Rapp, P.E.	
	Signature:		
	Title:	General Manager	
	Phone Number:	( 805 ) 340-7263	Date:

To summarize report delivery used and good-faith efforts taken, please complete the form below by checking all items that apply and fill-in where appropriate:

CCR was distributed by mail or other direct delivery methods. Specify other direct delivery methods used:  
\_\_\_\_\_

"Good faith" efforts were used to reach non-bill paying customers. Those efforts included the following methods:

- Posted the CCR on the internet at [http:// VenturaRiverWD.com](http://VenturaRiverWD.com)
- Mailed the CCR to postal patrons within the service area (attach zip codes used)
- Advertised the availability of the CCR in news media (attach a copy of press release)
- Publication of the CCR in a local newspaper of general circulation (attach a copy of the published notice, including name of the newspaper and date published)
- Posted the CCR in public places (attach a list of locations)
- Delivery of multiple copies of CCR to single bill addresses serving several persons, such as apartments, businesses, and schools
- Delivery to community organizations (attach a list of organizations)
- Other (attach a list of other methods used)

For systems serving at least 100,000 persons: Posted CCR on a publicly-accessible internet site at the following address: [http://\\_\\_\\_\\_\\_](http://_____)

For investor-owned utilities: Delivered the CCR to the California Public Utilities Commission

# 2022 Consumer Confidence Report

Water System Name: VENTURA RIVER WATER DISTRICT Report Date: March 2023

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2022.

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

**Type of water source(s) in use:** This Sources Well 01, Well 02, Well 03, Well 04, Well 06 and Well 7 are Groundwater. Please see the Drinking Water Source Assessment Information section located at the end of this report for more details.

**Your water comes from 6 source(s):** Well 01 (1989), Well 02, Well 03, Well 04 (2007), Well 06 and Well 07 (New) **and from 2 treated location(s):** Baldwin Tank #2 - NO3 BLEND and Baldwin Yard Soft Water Sample

**Opportunities for public participation in decisions that affect drinking water quality:** Regularly-scheduled Water District Board meetings held on the third Wednesday of the month at 3:00 p.m. at 409 Old Baldwin Road.

For more information about this report, or any questions relating to your drinking water, please call 8056463403 and ask for Bert Rapp or email [Bert@VenturaRiverWD.com](mailto:Bert@VenturaRiverWD.com).

## TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**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 (USEPA).

**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.

**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 contaminants.

**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.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for the contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Secondary Drinking Water Standards (SDWS):** MCLs for the contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

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

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**ND:** not detectable at testing limit

**mg/L:** milligrams per liter or parts per million (ppm)

**ug/L:** micrograms per liter or parts per billion (ppb)

**pCi/L:** picocuries per liter (a measure of radiation)

**NTU:** Nephelometric Turbidity Units

**umhos/cm:** micro mhos per centimeter

**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 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.

**In order to ensure that tap water is safe to drink**, the USEPA and the State Water Resource Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

**Tables 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent.** The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Water Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

Any violation of MCL, AL or MRDL is highlighted. Additional information regarding the violation is provided later in this report.

<b>Table 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER</b>							
<b>Lead and Copper</b> (complete if lead or copper detected in last sample set)	<b>Sample Date</b>	<b>No. of Samples</b>	<b>90th percentile level detected</b>	<b>No. Sites Exceeding AL</b>	<b>AL</b>	<b>PHG</b>	<b>Typical Sources of Contaminant</b>
Copper (mg/L)	(2022)	20	0.22	0	1.3	.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

<b>Table 2 - SAMPLING RESULTS FOR SODIUM AND HARDNESS</b>						
<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Average Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Sources of Contaminant</b>
Sodium (mg/L)	(2014 - 2022)	52	38 - 68	none	none	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	(2014 - 2022)	406	378 - 433	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

<b>Table 3 - TREATED SAMPLING RESULTS FOR SODIUM AND HARDNESS</b>						
<b>Chemical or Constituent</b> (and reporting units)	<b>Sample Date</b>	<b>Average Level Detected</b>	<b>Range of Detections</b>	<b>MCL</b>	<b>PHG (MCLG)</b>	<b>Typical Sources of Contaminant</b>
Sodium (mg/L)	(2021)	231	n/a	none	none	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	(2021)	41.4	n/a	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**Table 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Sources of Contaminant
Chromium (ug/L)	(2014 - 2022)	ND	ND - 14	50.0	n/a	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (mg/L)	(2014 - 2022)	0.3	ND - 0.5	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate as N (mg/L)	(2014 - 2022)	2.3	ND - 3.9	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	(2014 - 2022)	1.7	0.4 - 4.1	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite as N (mg/L)	(2014 - 2022)	ND	ND - 0.4	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Gross Alpha (pCi/L)	(2019 - 2022)	2.22	1.03 - 3.75	15	(0)	Erosion of natural deposits.

**Table 5 - TREATED DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Sources of Contaminant
Copper (mg/L)	(2021)	0.12	n/a	1.3	.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride (mg/L)	(2021)	0.4	n/a	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate as N (mg/L)	(2019 - 2021)	2.7	2.0 - 3.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	(2021)	3.3	n/a	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

**Table 6 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant
Chloride (mg/L)	(2014 - 2022)	51	28 - 129	500	n/a	Runoff/leaching from natural deposits; seawater influence
Iron (ug/L)	(2014 - 2022)	ND	ND - 100	300	n/a	Leaching from natural deposits; Industrial wastes
Specific Conductance (umhos/cm)	(2014 - 2022)	992	888 - 1120	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	(2014 - 2022)	218	113 - 272	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	(2014 - 2022)	660	590 - 720	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	(2014 - 2022)	0.3	ND - 1.0	5	n/a	Soil runoff

**Table 7 - TREATED DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant
Chloride (mg/L)	(2021)	53	n/a	500	n/a	Runoff/leaching from natural deposits; seawater influence
Copper (mg/L)	(2021)	0.12	n/a	1.0	1.0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron (ug/L)	(2021)	ND	n/a	300	n/a	Leaching from natural deposits; Industrial wastes
Specific Conductance (umhos/cm)	(2021)	1190	n/a	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	(2021)	241	n/a	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	(2021)	750	n/a	1000	n/a	Runoff/leaching from natural deposits
Zinc (mg/L)	(2021)	0.06	n/a	5	n/a	Runoff/leaching from natural deposits

**Table 8 - DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant
Boron (mg/L)	(2014 - 2022)	0.6	0.1 - 0.8	1	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Vanadium (ug/L)	(2014 - 2022)	ND	ND - 4	50	Vanadium exposures resulted in developmental and reproductive effects in rats.

**Table 9 - TREATED DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant
Boron (mg/L)	(2021)	0.6	n/a	1	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.

**Table 10 - ADDITIONAL DETECTIONS**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant
Calcium (mg/L)	(2014 - 2022)	114	107 - 119	n/a	n/a
Magnesium (mg/L)	(2014 - 2022)	30	27 - 33	n/a	n/a
pH (units)	(2014 - 2022)	7.8	7.5 - 8.1	n/a	n/a
Alkalinity (mg/L)	(2014 - 2022)	207	180 - 260	n/a	n/a
Aggressiveness Index	(2014 - 2022)	12.6	12.3 - 12.9	n/a	n/a
Langelier Index	(2014 - 2022)	0.7	0.4 - 1.0	n/a	n/a

**Table 11 - TREATED ADDITIONAL DETECTIONS**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant
Calcium (mg/L)	(2021)	10	n/a	n/a	n/a
Magnesium (mg/L)	(2021)	4	n/a	n/a	n/a
pH (units)	(2021)	8.79	n/a	n/a	n/a

Alkalinity (mg/L)	(2021)	240	n/a	n/a	n/a
Aggressiveness Index	(2021)	12.6	n/a	n/a	n/a
Langelier Index	(2021)	0.7	n/a	n/a	n/a

**Table 12 - DETECTION OF DISINFECTANT/DISINFECTANT BYPRODUCT RULE**

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL (MRDL)	PHG (MCLG)	Violation	Typical Sources of Contaminant
Total Trihalomethanes (TTHMs) (ug/L)	(2022)	49	5 - 69.0	80	n/a	No	By-product of drinking water disinfection
Chlorine (mg/L)	(2022)	0.00	n/a	4.0	4.0	No	Drinking water disinfectant added for treatment.
Haloacetic Acids (five) (ug/L)	(2022)	43.25	ND - 69	60	n/a	No	By-product of drinking water disinfection

Any violation of MCL, AL or MRDL is highlighted. Additional information regarding the violation is provided later in this report.

## Additional General Information on Drinking Water

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 the 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).

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).

Lead Specific Language for Community Water Systems: 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 the service lines and home plumbing. *Ventura River Water District* 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/lead>.

## Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL,MRDL,AL,TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken To Correct the Violation	Health Effects Language
Haloacetic Acids (five)				Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

# 2022 Consumer Confidence Report

## Drinking Water Assessment Information

### Assessment Information

VRWD has six active groundwater wells as its groundwater sources. The active wells are Wells 1, 2, 3, 4, 6 and 7. There are no sewer lines or sewage disposal facilities located within 50 feet of well sites. The six well sites are fenced for security. The wells are located about 700 feet from an active stream (when water is flowing). VRWD conducted the drinking water source assessment of its active wells in May of 2020.

- Well 03 - physical barrier effectiveness.  
Possible Contaminating Activities (top ranked):  
Septic systems
- Well 06 - Moderate physical barrier effectiveness.  
Possible Contaminating Activities (top ranked):  
Sewer collection systems; animal grazing; low density septic systems, agricultural drainage; agricultural wells; NPDES/WDR permitted discharges; storm drain discharge; storm water detention facility, roads; surface water
- Well 07 (New) - Moderate physical barrier effectiveness.  
Possible Contaminating Activities (top ranked):  
Sewer collection systems; animal grazing; low density septic systems, agricultural drainage; agricultural wells; NPDES/WDR permitted discharges; historic waste dumps/ landfills; storm drain discharge; storm water detention facility, roads and freeways; surface water

### Discussion of Vulnerability

There have been no contaminants detected in the water supply, however the wells are still considered vulnerable to activities located near the drinking water source.

Wells # 1, 2, 3, 4 & 7 are drinking water sources for the VENTURA RIVER WATER DISTRICT water system, they are located in the Upper Ventura River Groundwater Basin located in the Ojai Valley near Hwy 150 and the Ventura River. The Ventura River watershed covers 226 square miles and is the source for the Upper Ventura River Groundwater Basin. General land use is agricultural, urban, residential and National Forest.

The sources of contamination of Wells # 1, 2, 3, 4 & 7 that are of heightened concern are from onsite water treatment systems to the east of the wells, a sanitary sewer located 53-feet to 100-feet west of the wells and surface water in the Ventura River low flow channel located 1,000-feet west of the wells. Well # 1, 2, 3, 4 & 7 have been constructed with 50-foot deep sanitary seals and the first perforations vary from 72-feet to below the ground surface in Well #3 to 105-feet in Well #7. These design features will help protect against these three vulnerabilities.

Well #6: The most likely source of contamination of Well #6 is from onsite water treatment systems and an ephemeral drainage ditch located 180-feet north of the well. Well #6 has been constructed with a 120-foot deep sanitary seal and the first perforations are located 200-feet below the ground surface. These design features will help protect against these two vulnerabilities.

### Acquiring Information

A copy of the complete assessment may be viewed at:  
SWRCB Division of Drinking Water District Office  
1180 Eugenia Place  
Suite 200  
Carpinteria, CA 930135

You may request a summary of the assessment be sent to you by contacting:  
Jeff Densmore  
District Engineer  
(805) 566-1326  
jeff.densmore@cdph.ca.gov

A copy of the reports can also be downloaded at: <http://venturariverwd.com/reports>



# CASITAS MUNICIPAL WATER DISTRICT, PWS CA5610024

## Water Quality Summary, 2022 Data



WATER CLARITY	MCL or [MRDL]	PHG, (MCLG)	LAKE CASITAS TREATED				SAMPLE SOURCE & YEAR TESTED		SOURCE OF CONSTITUENT
			FILTER EFFLUENT		RANGE		Filter Effluent		
Direct Filtration	Treatment Technique (TT)		Highest Value = 0.07		0.01 - 0.07		2022		
Filter Effluent Turbidity <sup>a</sup> (NTU)	TT < 1	NA	100% of turbidity measurements were < 0.2 NTU				2022		Soil run-off
	95 % < 0.2	NA	100% = lowest monthly % of samples meeting turbidity limits				2022		
MICROBIOLOGICAL	MCL or (TT)	(MCLG)	DISTRIBUTION SYSTEM				Distribution System		
			HIGHEST # POSITIVE SAMPLES		NUMBER OF MONTHS IN VIOLATION				
Total Coliform Bacteria <sup>b</sup>	(More than 1 positive per month) <sup>b</sup>	(0)	1 / Month		0		2022		Naturally present in the environment
E. Coli <sup>c</sup>	Revised Total Coliform Rule: E. coli MCL <sup>c</sup>	(0)	0 / Year		0		2022		Human and Animal Fecal Waste
INORGANIC CHEMICALS	MCL	PHG	Lake Casitas Treated		Mira Monte Well Treated <sup>d</sup>		Lake Casitas Treated	Mira Monte Well Treated	
			AVERAGE	RANGE	AVERAGE	RANGE			
Barium (ppm)	1	2	0.11	NA	0.11	NA	2022	2022	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2	1	0.4	NA	0.4	NA	2022	2022	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (ppm)	10	10	ND	NA	0.7 <sup>d</sup>	0.5 - 0.8 <sup>d</sup>	2022	2022	Runoff and leaching from fertilizer use; leaching from tanks and sewage; erosion from natural deposits
DISINFECTANT RESIDUALS AND DISINFECTION BY-PRODUCTS	Running Annual Average (RAA) MCL or [MRDL]	PHG or [MRDLG]	DISTRIBUTION SYSTEM				Distribution System		
			HIGHEST [RAA]/LOCATIONAL RAA		INDIVIDUAL SAMPLE RANGE				
Chloramines as Cl <sub>2</sub> (ppm)	[4.0]	[4.0]	[2.7] <sup>e</sup>		0.2 - 3.9		2022		Drinking water disinfectant added for treatment
Trihalomethanes (ppb)	80	NA	52 <sup>e</sup>		38 - 68		2022		By-product of drinking water disinfection
Haloacetic acids (ppb)	60	NA	38 <sup>e</sup>		9 - 45		2022		By-product of drinking water disinfection
LEAD AND COPPER	Regulatory Action Level (RAL)	PHG	Number of Samples Collected	Homes above RAL	Level Detected at 90th percentile	Individual Taps <sup>e</sup>			
						Lake Treated	MMW Treated		
Lead (ppb) <sup>f</sup>	15	0.2	30	0	ND	2020		Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural products	
Copper (ppm) <sup>f</sup>	1.3	0.3	30	0	1.0	2020		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead school (ppb)	15	0.2	Number of schools requesting lead sampling = 4; Sample locations = 19; Locations above RAL = 0			2017		Internal corrosion of end-user plumbing systems; discharges from industrial manufacturers; erosion of natural products	

### SECONDARY AESTHETIC STANDARDS

CONSTITUENTS	STATE MCL	PHG	Lake Casitas Treated		Mira Monte Well Treated <sup>d</sup>		Year Tested		SOURCE OF CONSTITUENT
			AVERAGE	RANGE	AVERAGE	RANGE	Lake Treated	MMW Treated	
Apparent Color (color units)	15	NA	ND	NA	5	NA	2022	2022	Naturally-occurring organic materials
Total Dissolved Solids (ppm)	1000	NA	470	NA	450	NA	2022	2022	Run-off / leaching from natural deposits
Specific Conductance (µS/cm)	1600	NA	706	NA	725	NA	2022	2022	Substances that form ions in water; seawater influence
Chloride (ppm)	500	NA	23	NA	26	NA	2022	2022	Run-off/leaching from natural deposits; seawater influence
Sulfate (ppm)	500	NA	199	NA	189	NA	2022	2022	Run-off /leaching from natural deposits; industrial wastes

### ADDITIONAL CONSTITUENTS

ADDITIONAL CONSTITUENTS	SECONDARY MCL	PHG (NL)	Lake Casitas Treated		Mira Monte Well Treated <sup>d</sup>		Year Tested		SOURCE OF CONSTITUENT
			AVERAGE	RANGE	AVERAGE	RANGE	Lake Treated	MMW Treated	
Alkalinity - Total as CaCO <sub>3</sub> (ppm)	NA	NA	140	NA	150	NA	2022	2022	A measure of the capacity to neutralize acid
Boron (ppb)	NA	(1000)	200	NA	200	NA	2022	2022	A naturally-occurring element
Calcium (ppm)	NA	NA	69	NA	68	NA	2022	2022	A naturally-occurring element
Corrosivity (Langlier Index) <sup>f</sup>	Noncorrosive (US EPA)	NA	0.10	NA	0.05	NA	2022	2022	Indicator of corrosivity. Water with a positive Langlier Index can be considered as non-corrosive
Hardness - Total as CaCO <sub>3</sub> (ppm)	NA	NA	291 (17.0 gpg)	NA	285 (16.6 gpg)	NA	2022	2022	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring
Magnesium (ppm)	NA	NA	29	NA	28	NA	2022	2022	A naturally-occurring element
pH (pH standard units)	6.5-8.5 (US EPA)	NA	7.6	NA	7.5	NA	2022	2022	A measure of acidity or alkalinity
Potassium (ppm)	NA	NA	4	NA	4	NA	2022	2022	A naturally-occurring element
Sodium (ppm)	NA	NA	35	NA	34	NA	2022	2022	"Sodium" refers to the salt present in the water and is generally naturally occurring.
Vanadium (ppb)	NA	(50)	3	NA	3	NA	2022	2022	A naturally-occurring element

#### Abbreviations and Definitions:

**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. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

**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 (US EPA).

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**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.

**Running Annual Average (RAA):** Some MCL's are determined based on the running annual average which is calculated by averaging all sample results within the previous four quarters. Locational running annual average includes results averaged over the previous four quarters for a specific sample site.

**Notification Level (NL):** Health based advisory levels established by the State Board for chemicals in drinking water that lack MCLs.

**Primary Drinking Water Standards (PDWS):** MCLs, MRDLs and treatment techniques (TT) for contaminants that affect health, along with their monitoring and reporting requirements.

**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.

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

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

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

**MMW** - Mira Monte Well  
**NA** - Not Applicable or Available  
**ND** - None Detected at or above the limits of detection for reporting purposes  
**NL** - Notification Level  
**NS** - No Sample  
**NTU** - Nephelometric Turbidity Units (a measure of turbidity)  
**ppm** - Parts per million, or milligrams per liter (mg/L)  
**ppb** - Parts per billion, or micrograms per liter (µg/L)  
**RAA:** Running Annual Average  
**µS/cm** - Micro Siemens per Centimeter (a measure of specific conductance)  
**gpg** - Grains per gallon, an alternative unit used to measure hardness  
**US EPA** - United States Environmental Protection Agency

#### Water Quality Table Footnotes:

- Turbidity is a measure of the cloudiness of water and is a good measure of water quality and filtration performance; 100 % of the samples tested for turbidity were below the required TT level of 0.2 NTU and 100% is the lowest monthly percentage of samples meeting the turbidity limits.
- For systems collecting fewer than 40 samples per month: Two or more total-coliform positive monthly samples is a treatment technique trigger. During 2022 Casitas collected 159 routine and repeat distribution system samples for total coliform bacteria testing under the Revised Total Coliform Rule. Total coliform bacteria was detected in one routine sample, all repeat samples were absent for total coliform.
- Based on the Revised Total Coliform Rule, an E-Coli MCL violation occurs when 1) a routine and associated repeat sample(s) are total coliform-positive and either is E. coli -positive, 2) the system fails to take repeat samples following an E. coli -positive routine sample, or 3) the system fails to analyze a total coliform-positive repeat sample for E. coli. Casitas did not have any E. coli MCL violations during 2022.
- Mira Monte Well water receives blending treatment with lake Casitas Treated water and when operated, blended water is sampled weekly for nitrates with the resulting nitrate level averaging 0.7 ppm as nitrogen in 2022. All other sample results are from samples collected of the blended water.
- The State monitoring requirements for some contaminants is less than once per year because the concentrations of these contaminants do not change frequently. These data are from the most recent sampling, and although representative, are more than one year old.
- Casitas has implemented a corrosion control plan by adding a small amount of phosphate to the water to lower corrosivity and reduce copper levels.
- Highest running annual average and locational running annual averages are used to calculate the MCL / MRDL and include sample results from a previous reporting period, whereas range only includes individual sample results from 2022.