



# **WATER QUALITY REPORT**

## **2022**

# 2022 Water Quality Report

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For more than 65 years, the Vallecitos Water District (Vallecitos) has taken pride in the water it delivers to its now more than 105,000 residents. As a result of its commitment to excellence, Vallecitos is proud to provide the 2022 water quality test results for drinking water delivered to its customers.

After more than 150 types of tests conducted by its wholesalers – Metropolitan Water District of Southern California (MWD) and San Diego County Water Authority (SDCWA) – and additional tests performed by the City of Oceanside, Olivenhain Municipal Water District (OMWD) and Vallecitos, it has been concluded that your water either met or exceeded

all state and federal potable drinking water standards. Along with these tests, your drinking water went through a treatment process that included filtering and disinfecting to ensure acceptable quality. Results of our own testing, along with the City of Oceanside's, OMWD's and our wholesalers' monitoring are found in the tables of this report.

This publication is a summary of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to state and federal standards.

## Origins of Your Drinking Water

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As of 2014, Vallecitos customers received 100 percent imported water from SDCWA, which purchased the water from MWD from Northern California and the Colorado River. In November of 2015, to reduce dependence on imported water and provide customers an increased level of reliability despite drought and other regulatory issues, Vallecitos customers began receiving ocean water from the Western Hemisphere's largest desalination treatment plant. The Carlsbad Claude "Bud" Lewis Desalination Plant provides superior quality water free of salt and

virtually any mineral, biological or organic compounds by taking water from Carlsbad's Agua Hedionda Lagoon, processing it, and then distributing it through a 54-inch pipeline 10 miles eastward before being delivered to your faucet. In 2015, Vallecitos began receiving a blend of desalinated and imported water from SDCWA. However, in 2016, Vallecitos began receiving water directly from the plant.

Whether imported or local, your water remains safe during its journey due to increased security at key facilities, increased water sampling, and aerial and ground patrols. Protecting your water doesn't end with the thousands of tests performed throughout the year. Vallecitos also supports regulatory changes in public policy to improve water quality.



*Claude  
"Bud" Lewis  
Desalination Plant  
in Carlsbad*



*Colorado River  
via the 242-mile  
Colorado River  
Aqueduct*



*Sacramento-San  
Joaquin Delta via  
the 444-mile  
CA Aqueduct*

The end result is more than 5 billion gallons of an exceptional product delivered annually through 19 operational storage reservoirs and 350 miles of pipeline to a 45-square-mile area that includes San Marcos; Lake San Marcos; portions of Escondido, Carlsbad, and Vista; and unincorporated areas in San Diego County.

## The Water We Drink

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The U.S. Congress has directed the U.S. Environmental Protection Agency (USEPA) to require water systems to report the quality of the drinking water they serve annually. Vallecitos supports this regulation and has provided Water Quality Reports and other water quality data to all of its customers for many years.



# The Reason for Contaminants

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



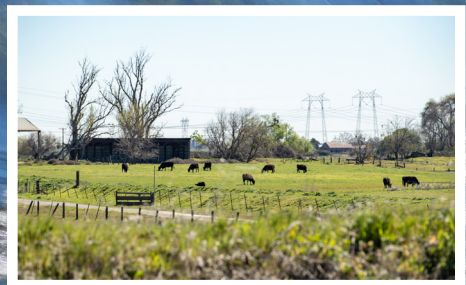
certain contaminants in water provided by public water systems. Vallecitos and its water wholesalers treat the water according to these regulations.

The sources of drinking water (both bottled and tap water) include rivers, lakes, streams, reservoirs, ponds, 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 human activity.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board prescribe regulations that limit the amount of

## Contaminants possibly present in source water before treatment 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**, 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 compounds that are by-products of industrial processes and petroleum production and can come from gas stations, urban stormwater runoff, agricultural application
- **Radioactive contaminants**, which can be naturally-occurring or the result of oil and gas production and mining activities.



## Health Advisories Regarding Your Water

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, persons 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/Center for Disease Control guidelines on the appropriate means to lessen the risk of infection by *Cryptosporidium* or other microbial contaminants are available from the **Safe Drinking Water Hotline (800) 426-4791**.

The tables below list all the drinking water contaminants tested for during the 2022 calendar year. Thousands of water quality tests were performed on your drinking water last year. Many more parameters were tested for and not found. The results in this report show that your water met, and in most cases exceeded, all of the stringent state (State Water Resources Control Board) and federal (U.S. Environmental Protection Agency) water quality standards relating to public health and aesthetics, such as taste, odor and color. Unless otherwise noted, the data in the following tables reflect testing from January 1, 2022, through December 31, 2022. The monitoring of certain contaminants is not required annually since they are not expected to vary significantly from year to year. Therefore, though representative of the water quality, some of the data may be more than one year old.

## Summary of Vallecitos Water District's 2022 Water Quality Analysis

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	Treatment Plant Effluents					Major Sources in Drinking Water
					Twin Oaks Treatment Plant	Skinner Treatment Plant	Weese Treatment Plant	Carlsbad Desalination Plant	Olivenhain Treatment Plant	
Percent State Project Water	%	NA	NA	Range Average	0 - 43 0 - 43	0 - 43 0 - 43	NR NR	NA NA	0 - 43 0 - 43	NA
<b>PRIMARY STANDARDS - Mandatory Health-Related Standards - Data provided by the San Diego County Water Authority (Twin Oaks Treatment Plant), the Metropolitan Water District (Skinner Treatment Plant), the City of Oceanside (Weese Treatment Plant), San Diego County Water Authority (Claude "Bud" Lewis Carlsbad Desalination Plant), and the Olivenhain Municipal Water District (David C. McCollom Water Treatment Plant).</b>										
<b>CLARITY</b>										
Combined Filter Effluent Turbidity	NTU	0.3	NA	Average	0.017	0.05	0.18	0.05	0.079	Soil runoff
	%	95 (a)		% ≤ 0.1	100%	100%	100%	100%	100%	
<b>MICROBIOLOGICAL</b>										
Total Coliform Bacteria (b)	%	5.0	(0)	Range Average	ND ND	0 0	ND ND	0 0	ND ND	Naturally present in the environment
E. coli (c)	(c)	(c)	(0)	Range Average	ND ND	0 0	ND ND	0 0	ND ND	Human and animal fecal waste
Heterotrophic Plate (d)	CFU/mL	TT	NA	Range Average	NR NR	ND ND	NR NR	NA NA	NR NR	Naturally present in the environment
<b>INORGANIC CHEMICALS</b>										
Arsenic	ppb	10	0.004	Range Average	Single/Sample 2.3	ND ND	NA 0.63	ND ND	Single/Sample 2.6	Natural deposits erosion; runoff from orchards; glass and electronics production wastes
Barium	ppm	1	2	Range Average	Single/Sample ND	ND ND	NA 0.086	ND ND	Single/Sample 0.11	Oil and metal refineries discharges; natural deposits erosion
<b>Optimal Fluoride Control Range</b>					0.6 - 1.2	NA	NA	NA	NA	
Fluoride Treatment-Related (e)	ppm	2.0	1	Range Average	0.5 - 0.7 0.6	0.6 - 0.8 0.7	Not Added	ND - 0.797 0.667	0.32 - 0.84 0.69	Erosion of natural deposits; water additive for dental health; discharge from fertilizer and aluminum factories
Nitrate (as N) (f)	ppm	10	10	Range Average	ND - 0.4 ND	ND ND	0.18 - 0.20 0.2	ND ND	NR NR	Runoff and leaching from fertilizer use; sewage; natural deposits erosion
<b>RADIOLOGICALS</b>										
Gross Alpha Particle Activity	pCi/L	15	(0)	Range Average	ND - 4 ND	ND - 3 ND	ND ND	ND ND	NR NR	Erosion of natural deposits
Gross Beta Particle Activity (g)	pCi/L	50	(0)	Range Average	4.9 - 5.1 5	5 - 8 7	NA NA	ND ND	NR NR	Decay of natural and man-made deposits
Uranium	pCi/L	20	0.43	Range Average	ND ND	ND - 2 2	NA 1.1	ND ND	Single/Sample 2.3	Erosion of natural deposits
<b>DISINFECTION BY-PRODUCTS PRECURSORS</b>										
Bromate (h)	ppb	10	0.1	Range Average	1.6 - 5.8 3	ND - 5.5 1.2	NR NR	NA NA	NR NR	By-product of drinking water ozonation
DBP Precursors Control (TOC)	ppm	TT	NA	Range Average	1.3 - 3.3 2.4	2.3 - 2.6 2.5	NR NR	NA NA	Single/Sample 2.0	Various natural and man-made sources

This analysis report lists only the detected parameters which are required by law to be published. However, more than 150 parameters were monitored. If you would like a copy of the full reports, including the non-detected contaminants, call the District's Public Information Office at (760) 744-0460 or the reports can be viewed on our website at [www.vwd.org](http://www.vwd.org).

### Source Water Information

For information regarding the Source Water Assessment, the following contacts are provided:

For information on the Lake Skinner source water and a source water assessment, please contact Mic Stewart with MWD at (213) 217-5696 or [mstewart@mwdeh2o.com](mailto:mstewart@mwdeh2o.com).

For information on SDCWA's water treatment plants, including the Twin Oaks Valley Water Treatment Plant or the Claude "Bud" Lewis Carlsbad Desalination Plant, please contact Chris Castaing with SDCWA at (760) 233-3279 or [ccastaing@sdewa.org](mailto:ccastaing@sdewa.org), or visit SDCWA's website at [www.sdcwa.org/water-quality](http://www.sdcwa.org/water-quality).

For more information on OMWD's DCMWTP or distribution system, please contact OMWD's Operations Manager at (760) 753-6466 or [waterquality@olivenhain.com](mailto:waterquality@olivenhain.com).

For more information on Oceanside's Weese Treatment plant, please contact Oceanside's Chief Plant Operator, Tim Bailey at (760) 908-6545 or [sterlingbailey33@gmail.com](mailto:sterlingbailey33@gmail.com). An additional Oceanside contact is William Reedy, Water Treatment Supervisor at (760) 801-0474 or [wreedy@oceansideca.org](mailto:wreedy@oceansideca.org).

## Summary of Vallecitos Water District's 2022 Water Quality Analysis - Continued

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	Treatment Plant Effluents					Major Sources in Drinking Water
					Twin Oaks Treatment Plant	Skinner Treatment Plant	Weese Treatment Plant	Carlsbad Desalination Plant	Olivenhain Treatment Plant	
SECONDARY STANDARDS - Aesthetic Standards - Data provided by the San Diego County Water Authority, Metropolitan Water District, Olivenhain Municipal Water District, and the City of Oceanside.										
Aluminum (i)	ppb	200	600	Range	ND - 220	ND - 230	53 - 150	ND	NR	Residue from water treatment process; natural deposits erosion
				Average	74	113	90	ND	NR	
Chloride	ppm	250	NA	Range	110 - 110	98 - 106	89 - 100	20 - 119	NR	Runoff/leaching from natural deposits; seawater influence
				Average	110	102	95	90	NR	
Color	Units	15	NA	Range	ND	1 - 2	ND	ND	ND - 1.0	Naturally occurring organic materials
				Average	ND	2	ND	ND	0.05	
Manganese	ppb	50	NL = 500	Range	ND	ND	ND	ND	NR	Leaching from natural deposits
				Average	ND	ND	ND	ND	NR	
Odor Threshold (j)	TON	3	NA	Range	Single/Sample	Single/Sample	ND	ND	ND	Naturally occurring organic materials
				Average	ND	1	ND	ND	ND	
Silver	ppb	100	NA	Range	Single/Sample	ND	NR	ND	NR	Industrial discharges
				Average	ND	ND	NR	ND	NR	
Specific Conductance	µS/cm	1,600	NA	Range	Single/Sample	944 - 1030	NR	345.4 - 484.6	Single/Sample	Substances that form ions in water; seawater influence
				Average	980	987	NR	400.8	910	
Sulfate	ppm	500	NA	Range	210 - 220	206 - 229	170 - 230	13 - 15	Single/Sample	Runoff/leaching from natural deposits; industrial wastes
				Average	217	218	206	13.5	210	
Total Dissolved Solids (TDS)	ppm	1,000	NA	Range	Single/Sample	591 - 651 (k)	NA	138 - 285	534 - 641	Runoff/leaching from natural deposits
				Average	610	621	480	210.7	588	
Turbidity (a)	NTU	5	NA	Range	ND	ND	ND - 0.9	ND - 0.32	0.05 - 0.3	Soil runoff
				Average	ND	ND	0.13	0.19	0.06	

### ABBREVIATIONS AND DEFINITIONS

<b>A</b> - Absent	<b>NRA</b> - No Running Average - Single Sample Collected
<b>CFU/mL</b> - Colony-Forming Units per milliliter	<b>NR</b> - Not Reported
<b>DBP</b> - Disinfection By-Products	<b>ND</b> - Not Detected
<b>MCL</b> - 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 are set to protect the odor, taste and appearance of drinking water.	<b>NTU</b> - Nephelometric Turbidity Units
<b>MCLG</b> - 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. Environmental Protection Agency.	<b>NL</b> - Notification Level - The level at which notification of the public water system's governing body is required.
<b>MPN</b> - Most Probable Number	<b>pCi/L</b> - picoCuries per liter
<b>MRDL</b> - 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.	<b>PHG</b> - 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 Environmental Protection Agency.
<b>MRDLG</b> - 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.	<b>ppb</b> - parts per billion or micrograms per liter (µg/L)
<b>N</b> - Nitrogen	<b>ppm</b> - parts per million or milligrams per liter (mg/L)
<b>NA</b> - Not Applicable	<b>RAA</b> - Running Annual Average
	<b>SI</b> - Saturation Index (Langellier)
	<b>TOC</b> - Total Organic Carbon
	<b>TT</b> - Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.
	<b>µS/cm</b> - microSiemen per centimeter; also equivalent to µmho/cm (micromho per centimeter)
	<b>Primary Standards</b> - (Primary Drinking Water Standards) - MCLs and MRDLs are set to provide the maximum feasible protection to public health. They regulate contaminant levels based on toxicity and adverse health affects.
	<b>Secondary Standards</b> - (Secondary Drinking Water Standards) - Requirements that ensure appearance, taste and smell of drinking water are acceptable.

### FOOTNOTES

- (a) - The turbidity level of the filtered water shall be less than or equal to 0.3 NTU (0.1 NTU at Twin Oaks Treatment Plant) in 95% of the measurements taken each month and shall not exceed 1 NTU at anytime. The less than or equal to 0.3 NTU in 95% measurement values are Treatment Technique requirements. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The monthly averages and ranges of turbidity shown in the Secondary Standards section were based on the treatment plant effluents.
- (b) - Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform-positive. Compliance is based on the combined distribution system sampling from all the treatment plants. The MCL was not violated.
- (c) - *E. coli* MCLs: The occurrence of 2 consecutive total coliform-positive samples, one of which contains fecal coliform/*E. coli* constitutes an acute MCL violation. The MCL was not violated.
- (d) - All distribution samples collected had detectable total chlorine residuals and no HPC was required. HPC reporting level is 1 CFU/mL.
- (e) - MWD, SDCWA, and OMWD were in compliance with all provisions of the State's Fluoridation System Requirements.
- (f) - State MCL is 45 mg/L as nitrate, which equals 10 mg/L as nitrogen.
- (g) - SWRCB considers 50 pCi/L to be the level of concern for beta particles; the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ.
- (h) - Reporting level is 3.0 ppb for Bromate.
- (i) - Aluminum and copper both have primary and secondary standards.
- (j) - Metropolitan utilizes a flavor-profile analysis method that can detect odor occurrences more accurately. Call MWD at (213) 217-6850 for more information.
- (k) - Metropolitan's TDS compliance data are based on flow-weighted monthly composite samples collected twice per year (April and October). The 12-month statistical summary of flow-weighted data is reported in the "Other Parameters" section.

# Summary of Vallecitos Water District's 2022 Water Quality Analysis - Continued

## Other Detected Constituents That May be of Interest to Consumers

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	Treatment Plant Effluents					Major Sources In Drinking Water
					Twin Oaks Treatment Plant	Skinner Treatment Plant	Weese Treatment Plant	Carlsbad Treatment Plant	Olivenhain Treatment Plant	
Alkalinity (a)	ppm	NA	NA	Range	Single/Sample	119 -128	112 - 137	46 - 87	Single/Sample	Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, silicate, and phosphate
				Average	130	124	128	61	120	
Boron	ppb	NL = 1,000	NA	Range	Single/Sample	Single/Sample	NA	470 - 910	NR	Runoff/leaching from natural deposits; industrial wastes; naturally occurring in ocean water
				Average	130	130	NA	620	NR	
Calcium	ppm	NA	NA	Range	67 - 68	63 - 71	54 - 79	16.7 - 30.4	Single/Sample	Runoff/leaching from natural deposits
				Average	68	67	69	20.7	69	
Chlorate	ppb	NL = 800	NA	Range	250 - 440	Single/Sample	NR	NA	NR	By-product of drinking water chlorination; industrial processes
				Average	336	75	NR	NA	NR	
Chromium VI (b)	ppb	NA	0.02	Range	0.03 - 0.22	ND	NR	ND	Single/Sample	Industrial waste discharge; could be naturally present as well
				Average	0.11	ND	NR	ND	0.045	
Corrosivity (c) (Aggressiveness Index)	AI	NA	NA	Range	Single/Sample	12.4 - 12.5	NR	10.3 - 11.2	NR	Elemental balance in water; affected by temperature, other factors
				Average	13	12.4	NR	10.5	NR	
Corrosivity (d) (Saturation Index)	SI	NA	NA	Range	Single/Sample	0.58 - 0.75	NR	0.04 - 0.59	NR	Elemental balance in water; affected by temperature, other factors
				Average	0.82	0.66	NR	0.23	NR	
Hardness	ppm	NA	NA	Range	Single/Sample	263 - 282	210 - 310	41.9 - 76.3	249 - 285	The sum of naturally occurring poly-valent cations present in the water
				Average	270	272	273	51.7	267	
Magnesium	ppm	NA	NA	Range	25 - 25	24 - 26	19 - 27	0.95 - 1.6	Single/Sample	Runoff/leaching from natural deposits
				Average	25	25	24	1.26	25	
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	Range	Single/Sample	Single/Sample	NR	NA	NR	By-product of drinking water chloramination; industrial processes
				Average	ND	4.4	NR	NA	NR	
pH	pH Units	NA	NA	Range	8.0 - 8.7	8.1 - 8.2	7.9 - 8.4	8.3 - 8.7	Single/Sample	NA
				Average	8.3	8.2	8.1	8.5	8.2	
Potassium	ppm	NA	NA	Range	4.7 - 4.8	4.4 - 4.8	NR	0.0 - 31.0	Single/Sample	Salt present in the water; naturally-occurring
				Average	4.8	4.6	NR	6.8	5.2	
Sodium	ppm	NA	NA	Range	98 - 98	96 - 103	NA	53 - 65	Single/Sample	The salt present in the water; generally naturally occurring
				Average	98	100	82	59	100	

### ABBREVIATIONS, DEFINITIONS AND FOOTNOTES

#### Abbreviations and Definitions- (Please refer to main table for other abbreviations and definitions)

- NR** - Not Reported  
**NL** - Notification Level - The level at which notification of the public water system's governing body is required.  
**ppt** - parts per trillion or nanograms per liter (ng/L).  
**NRA** - No Running Average - Single Sample Collected

#### Footnotes:

- (a) - Alkalinity and hardness was based on  $\text{CaCO}_3$   
(b) - Reporting level is 0.03 ppb for Chromium VI.  
(c) - AI <10.0 = Highly aggressive and very corrosive water  
AI ≥ 12.0 = Non-aggressive water  
AI (10.0 - 11.9) = Moderately aggressive water  
(d) - Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes  
Negative SI index = corrosive; tendency to dissolve calcium carbonate



## Summary of Vallecitos Water District's 2022 Water Quality Analysis - Continued

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	Range Average	Within VWD's System	Major Sources in Drinking Water
Summary of Water Quality Tests Within VWD's Distribution System - Data Provided by Vallecitos Water District						
Total Coliform Bacteria (a)	%	5.0 (a)	(0)	Range	ND	Naturally present in the environment
				Average		
Fecal Coliform & E. coli (b)	(b)	(b)	(0)	Range	ND	Human and animal fecal waste
				Average		
Total Trihalomethanes (TTHM) (c)	ppb	80	NA	Range	2.1 - 38.0	By-product of drinking water chlorination
				Highest LRAA	29.0	
Haloacetic Acids (five) (HAA5) (d)	ppb	60	NA	Range	ND - 13.0	By-product of drinking water chlorination
				Highest LRAA	9.0	
Total Chlorine Residual (e)	ppm	[4.0]	[4.0]	Range	0.3 - 3.6	Drinking water disinfectant added for treatment
				Highest RAA	2.1	
General Physical Sampling (f)	(f)	(f)	(f)	Secondary Standards (aesthetics) testing required by SWRCB within VWD's Distribution System		
MONITORED AT CUSTOMERS' TAP						
Copper (g)	ppm	AL = 1.3	0.3	90th Percentile	0.190	House pipes internal corrosion; erosion of natural deposits; leaching from wood preservatives
Lead (g)	ppb	AL = 15	0.2	90th Percentile	ND	House pipes internal corrosion; erosion of natural deposits; discharges from industrial manufacturers
ABBREVIATIONS AND DEFINITIONS						

### ABBREVIATIONS AND DEFINITIONS

<b>AL</b> - Action Level	<b>MRDLG</b> - 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.
<b>HAA5</b> - Haloacetic Acids (five)	<b>NL</b> - Notification Level
<b>MCL</b> - 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 are set to protect the odor, taste and appearance of drinking water.	<b>PHG</b> - 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 Environmental Protection Agency.
<b>MCLG</b> - 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. Environmental Protection Agency.	<b>ppb</b> - parts per billion or micrograms per liter (µg/L)
<b>MRDL</b> - 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.	<b>ppm</b> - parts per million or milligrams per liter (mg/L)
	<b>TTHM</b> - Total Trihalomethanes
	<b>RAA</b> - Running Annual Average
	<b>LRAA</b> - Locational Running Annual Average; highest LRAA is the highest of all Locational Running Annual Averages. Calculated as average of all samples collected within a 12-month period.

### FOOTNOTES

- (a) - The District tested more samples than required by the SWRCB. 1,560 samples were analyzed in 2022 and all samples tested negative for Total Coliform bacteria.  
The District was in compliance with the Total Coliform MCL for 2022.
- (b) - The District tested more samples than required by the SWRCB. 1,560 samples were analyzed in 2022 and all samples tested negative for Fecal/E. coli bacteria. The District was in compliance with the Fecal/E. coli MCL for 2022.
- (c) - The MCL for Total Trihalomethanes (TTHM) is determined by using a Locational Running Annual Average (LRAA) of the last four quarterly tests. The District was in compliance with the regulations concerning Total Trihalomethanes (TTHM) for 2022.
- (d) - The MCL for Haloacetic Acids (HAA5) is determined by using a Locational Running Annual Average (LRAA) of the last four quarterly tests. The District was in compliance with the regulations concerning Haloacetic Acids (HAA5) for 2022.
- (e) - Total chlorine is the sum of free and combined chlorine. Free chlorine is defined as the concentration of residual chlorine in water present as dissolved gas (Cl<sub>2</sub>), hypochlorous acid (HOCl), and/or hypochlorite ion (OCl<sup>-</sup>). Combined chlorine is defined as the residual chlorine existing in water in chemical combination with ammonia or organic amines which can be found in natural or polluted waters. Ammonia is sometimes deliberately added to chlorinated public water supplies to provide inorganic chloramines. This process is generally referred to as "chloramination". The water provided to you has had inorganic chloramines added as a disinfectant.
- (f) - These samples were tested for turbidity, odor, and color. The District was in compliance with the Secondary Standards for these tests in 2022.
- (g) - The federal and state standards for Lead and Copper are treatment techniques requiring agencies to optimize corrosion control treatment. The District is required to take 50 samples every three years. The data shown is from 50 samples taken during the 2022 period. Our next sample period is scheduled for June, 2024. The District was in compliance with the "Lead and Copper Rule" in 2022. In 2017, the District collected 73 samples from 19 schools and one daycare camp.

\*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. Vallecitos 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 drinking 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>.



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## - Special Edition - 2022 Water Quality Report

### Management Staff

Glenn Pruim, General Manager  
James Gumpel, Assistant General Manager  
Jason Hubbard, District Engineer  
Ed Pedrazzi, Operations and Maintenance Manager  
Wes Owen, Chief Financial Officer

The public is welcome to attend the Vallecitos Board Meetings the first and third Wednesday of each month at 5:00 pm in the Administration building—201 Vallecitos de Oro in San Marcos.

Meetings are also aired on San Marcos TV on Cox Communications Channel 19, Time Warner Channel 24 or AT&T U-verse Channel 99, which air on the Monday following the Wednesday meeting at 6:30 pm. Visit [www.san-marcos.net/smtv](http://www.san-marcos.net/smtv) for programming schedule.



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or follow us on Twitter  
[@vallecitoswater](https://twitter.com/vallecitoswater)

Parts per million (ppm) =  
One drop in a 10-gallon aquarium



Parts per billion (ppb) =  
One drop in a residential  
swimming pool

**FOR MORE INFORMATION:** This report is only a summary of the water quality activities during the past year. If you have any questions about your water quality or Vallecitos Water District, please visit our website at [www.vwd.org](http://www.vwd.org) or call (760) 744-0460 during business hours (Monday through Friday, 8 a.m. to 5 p.m.). The District's headquarters is located at 201 Vallecitos de Oro, San Marcos, CA 92069. Questions specific to water quality can be directed to Shawn Askine, Water Systems Supervisor, at (760) 744-0460, ext. 268. Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para más información llame al (760) 744-0460. For additional information, contact:

- \* **U.S. Environmental Protection Agency (USEPA)** - (800) 426-4791 - <http://water.epa.gov/drink/index.cfm>
- \* **National Center for Disease Control** - (404) 639-3311 - [www.cdc.gov](http://www.cdc.gov)
- \* **State Water Resources Control Board** - Division of Drinking Water  
(916) 449-5577 - [http://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/CCR.shtml](http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml)
- \* **Metropolitan Water District of Southern California** - (213) 217-6000 - [www.mwdh2o.com](http://www.mwdh2o.com)
- \* **San Diego County Water Authority** - (858)-522-6740 - [www.sdcwa.org](http://www.sdcwa.org)