# ANNUAL WATER OUALITY REPORT 2022

# CRESCENTA VALLEY WATER DISTRICT GLENWOOD PLANT

**Presented By** 



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



# **Our Mission Continues**

e are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.



#### **Public Meetings**

he Crescenta Valley Water District (CVWD) is governed by a five-member board of directors elected at large who meet the second and fourth Tuesday of each month. Public input is encouraged. Information regarding the district's board meetings and upcoming events can be found at www.cvwd.com.

The community is encouraged to attend special meetings such as budget workshops, strategic planning sessions, and rate hearings, which are advertised and posted on the district's website and at the administration office, 2700 Foothill Boulevard. Any member of the public may participate in CVWD meetings in person or by Zoom. Please see www.cvwd.com for additional information.



#### Important Health Information

opper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection



by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/ hotline.

#### **Our Mission**

Provide quality water and wastewater services to the Crescenta Valley community in a dependable and economically responsible manner.

#### **Our Vision**

Secure sustainable water supplies and ensure infrastructure reliability while furthering our commitment to accountability, transparency, and costeffectiveness.

**OUESTIONS?** 

For more information about this report, or for any questions relating to your drinking water, please contact Christy Colby at (818) 248-3925 or ccolby@cvwd.com.

## Substances That Could Be in Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material and can pick up substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, that can be naturally occurring or can result from urban 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, which are by-products of industrial processes and petroleum production and which can also come

from gas stations, urban stormwater runoff, agricultural

applications, and septic systems;



Radioactive Contaminants that can be naturally occurring or can be the result of oil and gas production and mining activities.

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

#### Source Water Assessment

CVWD's water system is located in Los Angeles County and serves the unincorporated communities of La Crescenta and Montrose as well as small areas within the Cities of La Canada-Flintridge and Glendale. The local water sources for the CVWD water system are Wells 01, 02, 05, 07, 08, 09, 10, 11, 12, 14, 16, and Pickens Tunnel, located between the Verdugo and San Gabriel Mountains in Crescenta Valley. The mountainous, rural recharge area is generally located to the south side of the San Gabriel Mountains and to the north side of the Verdugo Mountains, channeling to Crescenta Valley.

Groundwater within the Verdugo basin has historically contained levels of tetrachloroethylene (PCE) at concentrations that have varied over the last 40 years. PCE levels were detected in the early 1980s and have been monitored by CVWD and the U.S. EPA since 1981. The initial findings showed that the levels were above the 5-microgram-per-liter maximum contaminant level (MCL) established by U.S. EPA and the State Board Division of Drinking Water. The increased levels may have been due to dry cleaning and auto shop businesses using existing septic systems that discharged to the groundwater table. In the early 1980s, CVWD constructed a sewer system and eliminated the septic systems. Once the sewer system was in place, the levels of PCE dropped dramatically within the Verdugo basin. U.S. EPA started monitoring PCE levels as part of the Superfund cleanup for the San Fernando Valley within the Verdugo basin starting in 1990. In 1998 U.S. EPA declared that PCE levels in the Verdugo basin were below the MCL and no further action was required with respect to the Superfund cleanup.

Water from all wells has nitrate concentrations near and above the MCL. Water in some wells has elevated PCE values. Water from Wells 01, 07, and 09 is pumped to the Mills booster station and blended with imported water from the MWD connection at the Paschall blending station. The volume of the produced water is based on the water level in Oak Creek Reservoir.

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: dry cleaners, known contaminant plumes. The source is considered most vulnerable to the following activities not associated with any detected contaminants: historic sewer collection systems, waste dumps/landfills.

A copy of the completed assessment may be viewed at the State Board, Division of Drinking Water, 500 North Central Avenue, Suite 500, Glendale, CA 91203. You may request a summary of the assessment by contacting Chi Diep, P.E., District Engineer, at (818) 551-2054.

# **Test Results**

Our water is monitored for many different kinds of substances on a very stringent sampling schedule. The water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water (a complete list of all our analytical results is available upon request). Remember that detecting a substance does not mean the water is unsafe to drink; our goal is to keep all detections below their respective maximum allowed levels or MCLS's.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

REGULATED SUBSTANCES									
				Crescenta Dis	Crescenta Valley Water District		Metropolitan Water District's F. E. Weymouth Plant		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2022	1	0.6	ND	NA	0.156 <sup>1</sup>	0.052-0.241	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2022	10	0.004	0.09	ND-5.10	NA	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2022	1	2	0.1	ND-0.13	0.107	0.107-0.107	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2022	10	0.1	NA	NA	ND	ND-7.6	No	By-product of drinking water disinfection
Control of DBP precursors [TOC] (units)	2022	ΤТ	NA	NA	NA	2.4	1.7–2.6	No	Various natural and human-made sources
Fluoride (ppm)	2022	2.0	1	0.44 <sup>2</sup>	0.27–0.49	0.7	0.4–0.9 <sup>3</sup>	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2020	15	(0)	$3.9^{4}$	$2.4-7.5^4$	65	4-7 <sup>5</sup>	No	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2021	50 <sup>6</sup>	(0)	NA	NA	5 <sup>7</sup>	4-67	No	Decay of natural and human-made deposits
HAA5 [sum of 5 haloacetic acids]–Stage 2 (ppb)	2022	60	NA	12.4 <sup>8</sup>	5.9–19 <sup>8</sup>	9.8 <sup>9,10</sup>	1.5–149,10	No	By-product of drinking water disinfection
Hexavalent Chromium (ppb)	2022	NS <sup>11</sup>	0.02	0.67	0.32–2.0	ND	NA	No	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
N-Nitrosodimethylamine [NDMA] (ppt)	2021	NA	NA	NA	NA	ND <sup>5</sup>	ND-3.3 <sup>5</sup>	No	By-product of drinking water chloramination; industrial processes
Nitrate [as nitrate] (ppm)	2022	45	45	22.6 <sup>12</sup>	16.1–33.1 <sup>12</sup>	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radium 228 (pCi/L)	2022	5	0.019	NA	NA	ND	ND-1	No	Erosion of natural deposits
Tetrachloroethylene [PCE] (ppb)	2022	5	0.06	0.2912	ND-0.45 <sup>12</sup>	ND	NA	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
TTHMs [total trihalomethanes]–Stage 2 (ppb)	2022	80 <sup>13</sup>	NA <sup>14</sup>	46.5 <sup>8</sup>	26.0–69.0 <sup>8</sup>	34	11–42	No	By-product of drinking water disinfection
Turbidity (NTU)	2022	ΤТ	NA	NA	NA	100 <sup>15</sup>	0.04-10015	No	Soil runoff
Uranium (pCi/L)	2020	20	0.43	$4.3^{4}$	1.6–124	2 <sup>5,7</sup>	1-35,7	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community											
								Metropolitan Wa	ter District's F. E.		
				Crescenta Valley Water District				weymou	ith Plant		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT (90TH	DETECTED 1 %ILE)	SITES ABO TOTAL S	VE AL/ AMO TES	OUNT DETECTED (90TH %ILE)	SITES ABOVE AL	/ VIOLATIO	N TYPICAL SOURCE
Copper (ppb)	2020	1,300	170	ŝ	315	0/39		NA	NA	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2020	15	0.2	:	2.1 0/			NA	NA	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
SECONDARY SUBSTANCES											
				Crescenta Valley Wa District		Valley Water strict	ater Metropolitan Water District's F. E. Weymouth Plant				
SUBSTANCE (UNIT OF MEASURE)	SA	YEAR MPLED	SM	CL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	:	2022	20	0	NS	ND	NA	156 <sup>1</sup>	58-240 <sup>1</sup>	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	:	2022	50	0	NS	76	6–94	102	98–105	No	Runoff/leaching from natural deposits; seawater influence
Color (units)		2022	15	5	NS	1 <sup>12</sup>	1-112	1	1–1	No	Naturally occurring organic materials
Copper (ppm)	1	2022	1.	0	NS	ND	0.002-0.03	1 ND	NA	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Corrosivity</b> (units)	:	2022	Noncor	rosive <sup>16</sup>	NS	NA	NA	12.5	12.5–12.5	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water affected by temperature and other factors
Iron (ppb)		2022	30	0	NS	12	ND-260	ND	NA	No	Leaching from natural deposits; industrial wastes
Odor, Threshold (u	inits)	2022	3	;	NS	1	1–1	3 <sup>10</sup>	3-3 <sup>10</sup>	No	Naturally occurring organic materials
Specific Conductar (µS/cm)	nce 2	2022	1,6	00	NS	819	650–930	992	964–1,020	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)		2022	50	0	NS	104	30-130	222	212–232	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Sol (ppm)	lids 2	2022	1,0	00	NS	503	200–580	602	522–633	No	Runoff/leaching from natural deposits
Turbidity (NTU)		2022	5		NS	0.1712	0.06-0.44	<sup>12</sup> ND <sup>10</sup>	NA	No	Soil runoff

## Treatment

CVWD is required by the State Board to test its groundwater for organic chemicals, minerals, metals, and bacteria and perform daily, weekly, and monthly tests for bacteria, nitrates, and total trihalomethanes (TTHMs) in the distribution system. Lead and copper are tested in tap water from selected residences. MWD is responsible for water quality testing of its treated surface water.

Local groundwater is disinfected with chlorine before blending with MWD's imported surface water. The Verdugo basin groundwater contains nitrates, which are likely due to old septic systems and historical agricultural practices in Crescenta Valley. CVWD treats some of the groundwater through a nitrate removal process at its Glenwood facility or a biological treatment process at Well 2. The remaining groundwater is blended with imported surface water to lower the nitrate levels to below the MCL. The blend of imported surface water and groundwater delivered to your residence depends upon where you live in the community and the time of year.

UNREGULATED SUBSTANCES 18									
		Crescenta Valley Water District		Metropolitan Water District's F. E. Weymouth Plant					
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE			
Alkalinity (ppm)	2022	151	110–180	127	126–128	Naturally occurring			
Bicarbonate (ppm)	2022	151	110–180	NA	NA	Naturally occurring			
Boron (ppb)	2022	20	ND-140	140	140–140	Runoff/leaching from natural deposits; industrial wastes			
Calcium (ppm)	2022	81	35–96	70	68–71	Naturally occurring			
Chlorate (ppb)	2021	NA	NA	88 <sup>5</sup>	88-885	By-product of drinking water chlorination; industrial processes			
Hardness [as CaCO3] <sup>17</sup> (ppm)	2022	313	130–360	279	277–281	Leaching from natural deposits			
Magnesium (ppm)	2022	27	11–31	26	25–26	Naturally occurring			
pH (units)	2022	7.25 <sup>12</sup>	6.8–8.7 <sup>12</sup>	8.1	8.1-8.1	Naturally occurring			
Potassium (ppm)	2022	3.3	2.6–3.9	4.6	4.5-4.8	Naturally occurring			
Sodium (ppm)	2022	35	17–41	100	98–103	Runoff/leaching from natural deposits; seawater influence			
Vanadium (ppb)	2022	4	ND-4.8	ND	NA	Naturally occurring; industrial waste discharge			

<sup>1</sup>Compliance with the state MCL is based on a running annual average. No secondary standard MCL exceedance occurred.

<sup>2</sup>Results are from samples collected within the distribution system and reflect values after groundwater has been blended with imported water from MWD.

<sup>3</sup>MWD was in compliance with all provisions of the state's fluoridation requirements. Fluoride feed systems were temporarily out of service during treatment plant shutdowns or maintenance work in 2022, resulting in occasional fluoride levels below 0.7 ppm.

<sup>4</sup>Sampled in 2020.

<sup>5</sup>Sampled in 2022.

<sup>6</sup>The State Board considers 50 pCi/L to be the level of concern for beta particles.

<sup>7</sup> Starting in 2021, samples were collected quarterly for gross beta particle activity and annually for tritium and strontium 90. Gross alpha particle activity, radium, and uranium data are from samples collected in 2020 for the required triannual monitoring (2020-2022). Radon is also monitored voluntarily with the triannual radionuclides.

<sup>8</sup>Collected at the district's compliance locations.

<sup>9</sup>Collected within MWD's distribution system.

<sup>10</sup> Sampled in 2021.

<sup>11</sup>There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.

<sup>12</sup> Collected within the district's distribution system.

<sup>13</sup> Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

<sup>14</sup> PHG assigned for each individual THM. Health risk varies with different combinations and ratios of the other THMs in a particular sample.

<sup>15</sup> MWD monitors turbidity at the CFE locations using continuous and grab samples. Turbidity, a measure of cloudiness of the water, is an indicator of treatment performance. Turbidity was in compliance with the treatment technique's primary drinking water standard and the secondary drinking water standard of less than 5 NTU.

<sup>16</sup> AI ≥ 12.0 = nonaggressive water; AI 10.0 - 11.9 = moderately aggressive water; AI ≤ 10.0 = highly aggressive water. Reference: ANSI/AWWA Standard C400-93 (R98).

<sup>17</sup> To convert CaCO3 hardness from milligrams per liter to grains per gallons, divide the average by 17.1 (313 / 17.1 = 18.3 grains per gallon).

<sup>18</sup> Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.



#### Where Does Your Water Come From?

In 2022 approximately 56 percent of CVWD's source water came from local groundwater supply in the Verdugo basin. The majority of CVWD's groundwater wells are located along the Verdugo Wash, south of Honolulu Avenue, around 200 feet below the surface.

The remaining 44 percent came from imported surface water supplied by Foothill Municipal Water District (FMWD), which is a member agency to Metropolitan Water District of Southern California (MWD). MWD supplies surface water from the State Water Project in Northern California, a 444-mile conveyance system that starts at Lake Oroville and comes all the way to Pasadena; and the Colorado River via the Colorado River Aqueduct, which carries water 242 miles from Lake Havasu to Lake Mathews in Riverside. Due to shortages on the State Water Project, nearly all the purchased imported water came from the Colorado River.

# Lead in Home Plumbing

Tf present, elevated levels of lead can cause serious Lhealth problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking. (If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at (800) 426-4791 or www.epa.gov/safewater/lead.



# Definitions

**90th** %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

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

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. EPA.

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

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NA: Not applicable.

**ND** (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard.

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

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

**PHG (Public Health Goal):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

**ppb (parts per billion):** One part substance per billion parts water (or micrograms per liter).

**ppm (parts per million):** One part substance per million parts water (or milligrams per liter).

**ppt (parts per trillion):** One part substance per trillion parts water (or nanograms per liter).

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

**µS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

#### Your Agency at a Glance

CWWD provides approximately 33,000 customers with water and wastewater service through about 8,300 connections. The district has been serving the areas of La Crescenta, Montrose, and portions of Glendale and La Cañada since 1950.

The district maintains 95 miles of pipelines, 12 wells, 17 reservoirs, 34 booster pumps, 651 fire hydrants, stationary and mobile electrical generators, and emergency water interconnections with neighboring water agencies, ensuring a ready water supply whether it's for washing dishes or putting out a fire. The district can store up to 17.5 million gallons of water in its 17 steel and concrete reservoirs.

The district supplied approximately 1.2 billion gallons of water in 2022. This amount was approximately a 10-percent decrease from the previous year, likely due to water conservation restrictions. The district maintains two interconnections, with the City of Glendale and the Los Angeles Department of Water and Power, that can be used to supply water to district customers in an emergency.