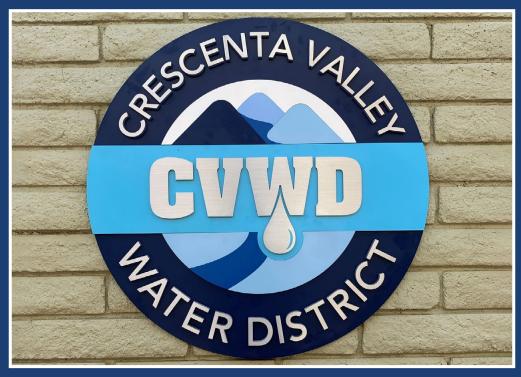
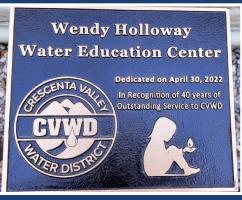
ANNUAL WATER OUALITY REPORT

Reporting Year 2021







Presented By

Crescenta Valley Water District

We've Come a Long Way

nce again, we are proud to present our annual water quality report covering the period between January 1 and December 31, 2021. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at all hours—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

Public Meetings

The Crescenta Valley Water District (CVWD) is governed by a five-member board of directors elected at large. They 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 cvwd.com.

Additionally, the community is encouraged to attend special meetings such as budget workshops, strategic planning sessions, and rate hearings, which are advertised and posted at cvwd.com and the district's administration office at 2700 Foothill Boulevard.

At the time of this report, all CVWD meetings are virtual under AB 361 and District Resolution No. 772. The district will continue to hold board and committee meetings by teleconference due to the continuing state of emergency and risks to the health and safety of attendees from COVID-19.

Any member of the public may participate in CVWD meetings by using a touch-tone phone or Zoom teleconferencing. Please see CVWD's website for additional information, as these requirements might change in the near future.

Treatment

CVWD is required by the State Board to test its ground-water for organic chemicals, minerals, metals, and bacteria and perform daily, weekly, and monthly tests for bacteria, nitrates, and total trihalomethanes 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 being blended with MWD's imported surface water. The Verdugo Basin groundwater contains nitrates, likely due to old septic systems and historical agricultural practices in the Crescenta Valley. CVWD treats some of the groundwater through a nitrate removal process at its Glenwood Facility or a biological treatment process at Well 02. The remaining groundwater is blended with imported surface water to reduce the nitrate levels to below the MCL. The blend of imported surface water and groundwater delivered to your residence varies depending on where you live and the time of year.

Lead in Home Plumbing

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. 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 epa.gov/safewater/lead.

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 water.epa.gov/drink/hotline.



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

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 City of La Cañada-Flintridge and the City of Glendale.

The local water sources for the CVWD system are Wells 01, 02, 05, 07, 08, 09, 10, 11, 12, 14, and 16 and Pickens Tunnel, located between the Verdugo and San Gabriel Mountains in Crescenta Valley. The mountainous, rural recharge area is located on the south side of the San Gabriel Mountains and the north side of the Verdugo Mountains, channeling to the Crescenta Valley.

The groundwater within the Verdugo Basin has contained levels of tetrachloroethylene (PCE) at varying concentrations over the last 40 years. PCE was detected in 1981 and has been monitored by CVWD and the U.S. EPA since then. The initial findings showed that the levels were above the maximum contaminant level (MCL) of 5 micrograms per liter (µg/L) established by the U.S. EPA and the State Board, Division of Drinking Water. The increased levels may be due to dry cleaners and auto shops 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. The 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 the U.S. EPA declared that the PCE levels in the Verdugo Basin were below the MCL and no further action was required.

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 water produced 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
- sewer collection systems
- historic waste dumps/landfills

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

Source water protection is an important issue for all of California. Large water utilities are required by the Division of Drinking Water to conduct an initial source water assessment, which is then updated through watershed sanitary surveys every five years. Watershed sanitary surveys examine possible sources of drinking water contamination and recommend actions to better protect these source waters. The most recent surveys for Metropolitan's source waters are the Colorado River Watershed Sanitary Survey – 2015 Update, and the State Water Project Watershed Sanitary Survey – 2016 Update.

Your Agency at a Glance

CVWD provides approximately 33,000 customers with water and wastewater service through about 8,100 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 pipeline,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 1.37 billion gallons of water in the 2021 calendar year. This amount was nearly the same in the previous year. The district maintains two interconnections, with the City of Glendale and the Los Angeles Department of Water and Power, which can be used to supply water to district customers in an emergency.

Table Talk

Get the most out of the Testing Results data table with these simple suggestions. In less than a minute, you will know all there is to know about your water.

For each substance listed, compare the value in the Amount Detected column against the value in the MCL (or AL or SMCL) column. If the Amount Detected value is smaller, your water meets the health and safety standards set for the substance.

Verify that there were no violations of the state or federal standards in the Violation column. If there was a violation, you will see a detailed description of the event in this report.

If there is an ND or a less-than symbol (<), that means that the substance was not detected (i.e., below the detectable limits of the testing equipment).

The Range column displays the lowest and highest sample readings. NA means only a single sample was taken to test for the substance (assuming there is a reported value in the Amount Detected column).

If there is sufficient evidence to indicate from where the substance originates, it will be listed under Typical Source.

Where Does Your Water Come From?

In 2021 approximately 51 percent of CVWD's source water came from local groundwater supply in the Verdugo Basin. The majority of CVWD's groundwater wells extend to around 200 feet below the surface and are located along the Verdugo Wash, south of Honolulu Avenue.

The remaining 49 percent was imported surface water supplied by Foothill Municipal Water District, which is a member of the 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 goes 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.

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.

Our Mission

To 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 a reliable infrastructure while furthering our commitment to accountability, transparency, and cost-effectiveness.

Count on Us

elivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water.
- Monitoring and inspecting machinery, meters, gauges, and operating conditions.
- Conducting tests and inspections on water and evaluating the results.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and 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 detects below their respective maximum allowed levels.

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.

								Crescenta Valley Water District MW		MWD'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)				2021	1	0.6	5.4	ND-140	0.1481	ND-0.240	No	Erosion of natural deposits; residue from some surface water treatment processes	
Barium (ppm)				2021	1	2	0.124	0.083-0.14	0.11	0.11-0.11	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits	
Bromate (ppb)		2021	10	0.1	NA	NA	ND	ND-7	No	By-product of drinking water disinfection			
Control of DBP Pro	ecursors [T	ΟC] (ι	ınits)	2021	TT	NA	NA	NA	2.4	1.8–2.5	No	Various natural and human-made sources	
Fluoride (ppm)				2021	2.0	1	0.452	0.31–0.652	0.73	$0.6 - 0.9^3$	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
Gross Alpha Particl	e Activity (pCi/L)		2021	15	(0)	3.94	2.4–7.54	ND5	NA	No	Erosion of natural deposits	
Gross Beta Particle	Activity (p	Ci/L)		2021	50 ⁶	(0)	NA	NA	5⁵	4-65	No	Decay of natural and human-made deposits	
HAA5 [sum of 5 ha	loacetic aci	ds]-St	age 2 (ppb	2021	60	NA	14.17	7.7–227	9.88	1.5–148	No	By-product of drinking water disinfection	
Hexavalent Chromium (ppb)				2021	NS ⁹	0.02	0.55	0.30-0.92	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	2.1	ND-4.2	No	By-product of drinking water chloramination; industrial processes	
Nitrate [as nitrate] (ppm)				2021	45	45	21.17	12.8–34.37	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Radium 228 (pCi/L)				2021	5	0.019	NA	NA	ND	ND-1	No	Erosion of natural deposits	
Tetrachloroethylene [PCE] (ppb)				2021	5	0.06	0.337	ND-0.58 ⁷	ND	NA	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)	
TTHMs [total triha	lomethane	s]–Staş	ge 2 (ppb)	2021	80	NA	50.97	27.8–69.47	3310	12-3910	No	By-product of drinking water disinfection	
Turbidity (NTU)				2021	TT	NA	NA	NA	10011	0.3 – 10011	No	Soil runoff	
Uranium (pCi/L)		2020	20	0.43	4.3	1.6–12	25	1-35	No	Erosion of natural deposits			
Tap water samples were	collected for	lead a	nd copper ar	alyses from san	ple sites t	hroughout the con	nmunity						
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DET (90TH %II		SITES ABOVE AL/TOTAL SITES	VIOLATION	ON TYPICAL SOURCE					
Copper (ppb)	2020	1.3	0.3	315		0/39	No	Internal corr	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Lead (ppb)	2020 15 0.2 2.1 0/39				No	No Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits							

SECONDARY SUBSTANCES										
				Crescenta Valley Water District		MWD's F.E. Weymouth Plant				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE	
Aluminum (ppb)	2021	200	NS	5.4	ND-140	148	ND-240 ¹	No	Erosion of natural deposits; residual from some surface water treatment processes	
Chloride (ppm)	2021	500	NS	88	75–100	93	93–93	No	Runoff/leaching from natural deposits; seawater influence	
Color (units)	2021	15	NS	17	1–17	1	1–1	No	Naturally occurring organic materials	
Corrosivity (units)	2021	Non- corrosive ¹²	NS	NA	NA	12.4	12.4–12.5	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water affected by temperature and other factors	
Iron (ppb)	2021	300	NS	16	ND-410 ¹³	ND	NA	No	Leaching from natural deposits; industrial wastes	
Odor, Threshold (units)	2021	3	NS	17	1–17	1	1–1	No	Naturally occurring organic materials	
Specific Conductance (μS/cm)	2021	1,600	NS	834	646–899	964	962–965	No	Substances that form ions when in water; seawater influence	
Sulfate (ppm)	2021	500	NS	117	53–140	219	217–221	No	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (ppm)	2021	1,000	NS	534	420–580	60414	599–60914	No	Runoff/leaching from natural deposits	
Turbidity (NTU)	2021	5	NS	0.117	0.06-0.457	ND	NA	No	Soil runoff	

UNREGULATED SUBSTANCES 16										
		Crescenta Valle	ey Water District	MWD's F.E. Wey	mouth Plant					
SUBSTANCE YEAR (UNIT OF MEASURE) SAMPLED		AMOUNT RANGE DETECTED LOW-HIGH		AMOUNT RANGE DETECTED LOW-HIGH		TYPICAL SOURCE				
Alkalinity (ppm)	2021	153	120–180	126	123–128	Naturally occurring				
Bicarbonate (ppm)	2021	186	140-220	NA	NA	Naturally occurring				
Boron (ppb)	2021	5	ND-120	130	130–130	Runoff/leaching from natural deposits; industrial wastes				
Calcium (ppm)	2021	81	52–95	67	64–70	Naturally occurring				
Chlorate (ppb)	2021	NA	NA	55	55–55	By-product of drinking water chlorination; industrial processes				
Hardness [as CaCO3] ¹⁵ (ppm)	2021	323	230–370	272	270–273	Leaching from natural deposits				
Magnesium (ppm)	2021	29	23–32	26	25–26	Naturally occurring				
pH (units)	2021	7.6	7.3–8.3	8.1	8.1-8.1	Naturally occurring				
Potassium (ppm)	2021	3.4	2.6-3.8	4.6	4.4–4.7	Naturally occurring				
Sodium (ppm)	2021	37	30–41	98	95–101	Runoff/leaching from natural deposits; seawater influence				
Vanadium (ppb)	2021	3	3–4.4	ND	NA	Naturally occurring; industrial waste discharge				

- ¹ Compliance with the state MCL for aluminum is based on a running annual average. No exceedance occurred.
- ²Results are from samples collected within the distribution system and reflect values after groundwater has been blended with imported water from MWD.
- ³MWD was in compliance with all provisions of the state's fluoridation system requirements.
- ⁴ Sampled in 2020.
- ⁵ Starting in 2021, MWD collected samples 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 triennial monitoring (2020-2022). Radon is also monitored voluntarily with the triennial radionuclides.
- ⁶The State Board considers 50 pCi/L to be the level of concern for beta particles.
- ⁷ Samples were collected within the distribution system.
- ⁸ Samples were collected within MWD's distribution system.
- ⁹There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.
- ¹⁰ These data represent the treatment plant-specific core locations per the state-approved monitoring plan.
- ¹¹ MWD monitors turbidity at the Combined Filter Effluent 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 TT primary drinking water standard and the secondary drinking water standard of less than 5 NTU.
- ¹² AI ≥ 12 = non-aggressive water; AI 10 11.9 = moderately aggressive water; AI ≤ 10 = highly aggressive water. Reference: ANSI/AWWA Standard C400-93 (R98).
- ¹³ Samples collected in the distribution system did not contain iron above the secondary MCL of 300 ppb. The result of 410 ppb at Well 02 was from a one-time incident that occurred when the well was started-up following annual maintenance.
- ¹⁴ MWD's TDS compliance data are based on flow-weighted monthly composite samples collected twice per year (April and October).
- 15 To convert the data from ppm to grains per gallon, divide the average by 17.1 (323 / 17.1 = 18.9).
- ¹⁶ Unregulated contaminant monitoring helps U.S. EPA and the State Board determine where certain contaminants occur and whether the contaminants need to be regulated.

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.