ANNUAL WATER QUALITY REPORT

Reporting Year 2018

Presented By

Crescenta Valley Water District

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

PWS ID#: 1910028

Report Introduction

Crescenta Valley Water District is required to meet all state and federal regulations pertaining to the Safe Drinking Water Act. All public water systems are required to deliver an annual water quality report to their consumers. This annual water quality report is intended to provide you, the consumer, with information about the quality of your drinking water and where it comes from.

Our district collects hundreds of water samples to ensure a reliable supply of high-quality drinking water. We are pleased to report that there were no water quality violations in 2018. It is our perspective that our drinking water service is more than a utility; it's a service that delivers public health, fire protection, sustains the environment, and provides support for the economy and quality of life for the people and businesses we serve.

The district is committed to keeping its consumers informed; for this reason, you are encouraged to read this report in its entirety. Informed consumers are more likely to help protect their drinking water supplies and understand the true costs and value associated with providing drinking water to our community.

Please remember that we are always available should you ever have any questions or concerns about your water.

Where Does My Water Come From?

In 2018 approximately 42.5 percent of CVWD's source water came from local groundwater supply in Verdugo Basin. The majority of CVWD's groundwater wells are located along Verdugo Wash, south of Honolulu Avenue. This is a decrease over last year's groundwater production due to low water levels in Verdugo Basin. In fact, groundwater levels and pumping are at an all-time historic low. Verdugo Basin has not yet recovered from one of the worst droughts on record (2011-2017) with 2011-2014 being the driest period in California since record keeping started. Local rainfall can take up to 3 years to reach the aquifer.

The remaining 57.5 percent of CVWD's source water was imported surface water supplied by Foothill Municipal Water District (FMWD), 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 and Colorado River via the Colorado River Aqueduct, which carries water 242 miles from Lake Havasu to Lake Mathews in Riverside, California.

The district supplied approximately 1.2 billion gallons of water in 2018, essentially the same as the previous year. Because groundwater production decreased, the costs of purchasing imported water (three times as much as pumping groundwater) increased.

In an emergency, an interconnection between CVWD and the City of Glendale can be used to supply water to district customers. The district also has an interconnection with the Los Angeles Department of Water and Power. This connection has been tested and further ensures the district water system's reliability.

QUESTIONS?

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

Treatment

CVWD is required by the State Water Resources Control Board, Division of Drinking Water, (SWRCB) to test its groundwater for organic chemicals, minerals, metals, and bacteria and perform daily, weekly, and monthly tests for bacteria, nitrates, and total trihalomethanes in the distribution system. Tap water from selected residences is tested for lead and copper. 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, likely due to old septic systems and historical agricultural practices in Crescenta Valley. CVWD treats some of the groundwater with a nitrate removal process at our Glenwood Facility. The remaining groundwater is blended with imported surface water to bring the nitrate levels below the MCL. The blend of imported surface water and groundwater delivered to your residence depends on where you live and the time of year.

Important Health Information

Nitrate in drinking water at levels above 45 parts per million (ppm) is a health risk for infants of less than 6 months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 ppm may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

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.

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.

> We remain vigilant in delivering the best-quality drinking water

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.

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 2 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 at www.epa.gov/safewater/lead.

Your Agency at a Glance

CVWD's mission is to provide dependable water service and wastewater collection to its customers in La Crescenta, Montrose, and portions of Glendale and La Cañada Flintridge.

We provide approximately 33,000 customers with water and wastewater service through more than 8,200 connections. The district has been serving the areas of La Crescenta, Montrose, and portions of Glendale and La Cañada Flintridge since 1950. We maintain 95 miles of pipelines, 12 wells, 17 reservoirs, 34 booster pumps, 651 fire hydrants, stationary and mobile generators, and emergency water interconnections to neighboring water agencies, ensuring a ready water supply whether it's for washing dishes or putting out a fire.

Source Water Assessment

The CVWD water system is located in Los Angeles County and serves the residents of the City of La Crescenta and portions of Glendale, Montrose, and La Cañada Flintridge. There are 8,200 metered service connections serving a population of approximately 33,000.

The drinking water sources for the district water system are Wells 01, 02, 05, 06, 07, 08, 09, 10, 11, 12, 14, 15, and Pickens Tunnels, 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 into Crescenta Valley.

Groundwater within Verdugo Basin has historically contained levels of tetrachloroethylene (PCE) at concentrations that have varied over the last 20 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 the U.S. EPA and California State Division of Drinking Water. The increased levels may be due to dry cleaning and auto shop businesses using existing septic systems that discharge 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. The U.S. EPA started monitoring PCE levels as part of the Superfund cleanup of the San Fernando Valley within Verdugo Basin starting in 1990. In 1998 the U.S. EPA declared that PCE levels in 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 above the MCL. Water from Well 14 is high in PCE. 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 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 and known contaminant plumes. The source is considered most vulnerable to the following activities not associated with any detected contaminants: Historic sewer collection systems and waste dumps/landfills.

A copy of the completed assessment may be viewed at the Drinking Water Field Operations Branch, 500 North Central Avenue, Suite 500, Glendale, California. You may request a summary of the assessment by contacting Chi Diep, District Engineer, at (818) 551-2054.

Public Meetings

The district is governed by a five-member board of elected directors who meet the second and fourth Tuesday of each month at the Crescenta Valley Water District (CVWD) administration office, 2700 Foothill Boulevard. Public input is encouraged. Information regarding board meetings and upcoming events can be found on our website at www.cvwd.com.

Additionally, the community is encouraged to attend special meetings such as budget workshops, strategic planning sessions, and rate hearings, which are posted on the district website and at our office.

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.

The district participated in the fourth stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR4) program by performing additional tests on our drinking water. UCMR4 sampling benefits the environment and public health by providing the U.S. EPA with data on the occurrence of contaminants suspected to be in drinking water in order to determine if U.S. EPA needs to introduce new regulatory standards to improve drinking water quality. Unregulated contaminant monitoring data are available to the public, so please feel free to contact us if you are interested in obtaining that information. If you would like more information on the U.S. EPA's Unregulated Contaminants Monitoring Rule, please call the Safe Drinking Water Hotline at (800) 426-4791.

REGULATED SUBSTANCES

				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)	2018	1	0.6	ND	NA	0.105	ND–0.220	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2018	10	0.004	0.4	ND–2.3	ND	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2018	1	2	0.66	ND–0.150	0.118	0.118–0.118	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2018	10	0.1	NA	NA	5[1]	ND–10[1]	No	By-product of drinking water disinfection
Control of DBP precursors [TOC] (Units)	2018	TT	NA	NA	NA	2.4	2.1–2.8	No	Various natural and man-made sources
Fluoride[2] (ppm)	2018	2.0	1	0.54	0.27–0.74	0.7	0.7–0.7	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity[3] (pCi/L)	2016	15	(0)	4.7	3.3–6.6	ND[4]	NA[4]	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2018	60	NA	18	9.8–27	16[5]	16–16[5]	No	By-product of drinking water disinfection
Hexavalent Chromium (ppb)	2018	NS[6]	0.02	0.50	0.2–0.7	ND	NA	No	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Methyl tert-Butyl Ether [MTBE] (ppb)	2018	13	13	ND	NA	NA	NA	No	Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories
Nitrate [as nitrate] (ppm)	2018	45	45	29[7]	23–35[7]	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene [PCE] (ppb)	2018	5	0.06	0.48[7]	ND–0.96[7]	ND	NA	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Total Coliform Bacteria [Federal Revised Total Coliform Rule] (Positive samples)	2018	TT	NA	4	NA	NA	NA	No	Naturally present in the environment

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	Crescenta Valley Water District AMOUNT DETECTED	Crescenta Valley Water District RANGE LOW-HIGH	Metropolitan Water District's F. E. Weymouth Plant AMOUNT DETECTED	Metropolitan Water District's F. E. Weymouth Plant RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
TTHMs [Total Trihalomethanes] (ppb)	2018	80[8]	NA	69	42–92	34	21–35	No	By-product of drinking water disinfection
Turbidity (NTU)	2018	TT	NA	NA	NA	100[9]	0.06–100[9]	No	Soil runoff
Uranium (pCi/L)	2016	20	0.43	3.8	1.2–6.8	ND[4,10]	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2017	1.3	0.3	0.206	0/34	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2017	15	0.2	2.2	0/34	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	Crescenta Valley Water District AMOUNT DETECTED	Crescenta Valley Water District RANGE LOW-HIGH	Metropolitan Water District's F. E. Weymouth Plant AMOUNT DETECTED	Metropolitan Water District's F. E. Weymouth Plant RANGE LOW-HIGH	EXCEEDANCE	TYPICAL SOURCE
Aluminum (ppb)	2018	200	NS	ND	NA	105	ND–220	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2018	500	NS	78	34–90	96	96–97	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2018	15	NS	1.2	1–2	ND	ND–1	No	Naturally occurring organic materials
Copper (ppm)	2018	1.0	NS	0.0012	ND–0.011	ND	NA	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Corrosivity (Units)	2018	Non-corrosive	NS	NA	NA	12.4	12.2–12.5	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in water, affected by temperature and other factors
Iron (ppb)	2018	300	NS	152[11]	ND–1,900[11]	ND	NA	Yes	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2018	50	NS	1	ND–18	ND	NA	No	Leaching from natural deposits
Methyl tert-Butyl Ether [MTBE] (ppb)	2018	5	NS	ND	NA	NA	NA	No	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor–Threshold (Units)	2018	3	NS	0.5	ND–2.0	3[12]	3–3[12]	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2018	1,600	NS	796	446–846	954	897–1,010	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2018	500	NS	110	48–130	213	213–236	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2018	1,000	NS	542	300–580	596	553–639	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2018	5	NS	0.18[7]	0.08–2.52[7]	ND	NA	No	Soil runoff

UNREGULATED AND OTHER SUBSTANCES [13]

		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)	2018	157	130–170	112	107–117	Naturally occurring
Aluminum (ppb)	2018	ND	NA	NA	NA	Erosion of natural deposits; residue from some surface water treatment processes
Boron (ppb)	2018	4.5	ND–100	130	130–130	Runoff/leaching from natural deposits; industrial wastes
Calcium (ppm)	2018	83	42–94	63	57–69	Naturally occurring
Chlorate (ppb)	2018	NA	NA	32	32–32	By-product of drinking water chlorination; industrial processes
Chloroform (ppb)	2018	1.3	0.8–6.6	NS[14]	NA[14]	By-product of drinking water disinfection
Hardness as CaCO3[15] (ppm)	2018	330	170–370	254	233–274	Leaching from natural deposits
Magnesium (ppm)	2018	30	15–34	24	23–26	Naturally occurring
N-Nitrosodimethylamine [NDMA] (ppt)	2018	NA	NA	2.2	NA	By-product of drinking water chloramination; industrial processes
pH[7] (Units)	2018	7.9	7.3–8.3	8.1	8.1–8.2	Naturally occurring
Potassium (ppm)	2018	3.4	3.1–3.9	4.7	4.5–5.0	Naturally occurring
Sodium (ppm)	2018	35	30–31	98	94–103	Runoff/leaching from natural deposits; seawater influence
Vanadium (ppb)	2018	4.2	ND–4.7	ND	NA	Erosion of natural deposits

[1] Compliance with the state and federal bromate MCL is based on a running annual average (RAA).
[2] Results are from samples collected within the distribution system and reflect values after the water has been blended with imported water from MWD. Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.
[3] The data collected for Crescenta Valley Water District is from 2016 with the exception of Well 8, which was collected in 2017. Metropolitan's required triennial monitoring (2020-2022) will be performed in 2020.
[4] Sampled in 2017.
[5] Represents the treatment plant's specific core locations per the state-approved monitoring plan.
[6] There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.
[7] Results represent samples collected within the district's distribution system.
[8] 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.
[9] 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 primary drinking water standard and the secondary drinking water standard of less than 5 NTU.
[10] Metropolitan's required triennial monitoring (2020-2022) will be performed in 2020.
[11] Samples collected in the distribution system did not contain iron above the secondary MCL of 300. The high result of 8,000 ppb was a one-time incident that occurred when the well was started.
[12] Compliance with secondary MCL is based on a running annual average (RAA). Treatment plants begin quarterly monitoring if annual monitoring results are above 3.
[13] Unregulated contaminant monitoring helps U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.
[14] Sampled in 2016.
[15] To convert the data from mg/L CaCO3 hardness to grains per gallons hardness, divide the average by 17.1 (330 / 17.1 = 19.3 grains per gallon).

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.

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

LRAA (Locational Running Annual Average): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

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.