Cucamonga Valley® Water District

Service Beyond Expectation

2019 Water Quality Report

Dear Consumers,

The Cucamonga Valley Water District takes great pride in providing our customers with a high quality, reliable water supply, and we strive to provide our customers with *Service Beyond Expectation* every time you turn on the tap. In 1996, the United States Congress amended the Safe Drinking Water Act, requiring water providers to deliver an annual Water Quality Report to their consumers. The Water Quality Report is intended to provide you with information regarding the quality and safe delivery of your drinking water. CVWD is pleased to report that we had zero water quality violations in 2019. We encourage you to read this report in its entirety and to please let us know if you have any questions or concerns. We will continue to provide you, your family, your business, and your community with the water supply you need to prosper each day in the Cucamonga Valley.

Sincerely,
Cucamonga Valley Water District
Board of Directors

An Electronic Report is Available Online at: http://www.cvwdwater.com/CCRpdf

CVWD Water Sources

The water supplied to CVWD consumers comes from several sources including imported surface water from Northern California, groundwater pumped from local aquifers, and a combination of waters collected from canyons and tunnels along the local mountains.

- **Imported Water:** Water that comes from outside the immediate area that is delivered to a community. Forty-three percent of the water delivered to CVWD consumers in 2019 was imported from Northern California. Imported water is delivered to CVWD via the State Water Project. This water is treated at CVWD's Lloyd W. Michael Water Treatment Plant. The treated water flows into storage reservoirs and then into the distribution system to consumers.
- **Groundwater:** Water below the earth's surface typically in subterranean lakes called aquifers. Forty-seven percent of the water delivered to CVWD consumers in 2019 was groundwater pumped from the Cucamonga Basin and Chino Basin aquifers. Groundwater is pumped from hundreds of feet below the earth's surface. The water is disinfected as it flows into storage reservoirs and then into the distribution system to consumers.
- **Local Canyon and Tunnel Water:** Water that flows out of our local canyons and foothills; often a combination of surface and groundwater. Ten percent of the water delivered to CVWD's consumers in 2019 was local canyon and tunnel water. These sources include Cucamonga Canyon, Deer Canyon, Day Canyon, East Etiwanda Canyon, and a number of tunnels in the local San Gabriel Mountains. This water is treated at CVWD's Arthur H. Bridge or Lloyd Michael Treatment Plants and then flows into storage reservoirs and then into the distribution system to consumers.

Your Drinking Water Sources

All drinking water- tap water and bottled water- comes from multiple sources, including 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. It can also pick-up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in untreated drinking water sources include:

- ✓ Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- ✓ Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- ✓ Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- ✓ Organic chemical contaminants, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- ✓ Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (SWRCB) 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. Additional information on bottled water is available on the California Department of Public Health website: https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx.

Contamination Vulnerability of CVWD's Water Sources

CVWD routinely conducts source water assessments to determine the contamination vulnerabilities of CVWD's water sources. Our sources are considered vulnerable to contamination from activities associated with former citrus agriculture, sewer collection systems, leaking or improper disposal of petroleum products, and recreation activities on or near water supplies. You may request additional information by contacting CVWD at (909) 987-2591.

How Your Water is Treated and Tested

CVWD uses state-of-the-art technology to treat and test the water served to its consumers. CVWD operates a total of three water treatment facilities that must meet surface water treatment regulations established by the USEPA and the SWRCB. These facilities are staffed by professional Water Treatment Plant Operators certified by the SWRCB.

Before, during, and after treatment, CVWD collects and analyzes water samples every four hours, twenty-four hours a day, seven days a week. In addition to routine testing performed at the treatment plants, water throughout the distribution system is analyzed weekly for disinfectant residuals and bacteriological content. Thousands of other tests are conducted throughout the year to ensure your water meets all federal and state regulations.

About Your Water

In 2019, CVWD collected more than 40,000 water samples that were analyzed for more than 260 different contaminants. Only contaminants that were detected are included in the tables provided in this Report. If a contaminant is not listed, it was not detected in 2019. The SWRCB allows CVWD to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. The data reported in the tables is compiled from analyses performed in 2019, except where noted.

Table 1 lists contaminants regulated by **Primary Drinking Water Standards**. These standards have been developed to control contaminants that have been determined to pose a risk to health. Compliance with drinking water standards is generally determined by the average level of a contaminant. In the event a single sample exceeds the Maximum Contaminant Level (MCL), a series of repeat samples is analyzed, and the results are averaged to determine compliance. In an effort to keep our consumers informed, this report contains both the detected range, which in some instances may exceed the MCL, and the average, demonstrating compliance.

Table 2 lists contaminants regulated by **Secondary Drinking Water Standards**. Generally, these standards have been developed to address the aesthetic properties of drinking water. In addition to constituents regulated by secondary standards, we have included data regarding Sodium and Hardness which may be of interest to consumers.

Table 3 lists data on contaminants that are not regulated. Federal and state environmental and health agencies, along with local drinking water providers, continually monitor and study the occurrence and potential impact of such contaminants as they relate to drinking water. Unregulated contaminant monitoring helps the USEPA and the SWRCB determine where certain contaminants occur and whether the contaminants need to be regulated.

Key Terms

Below are terms to assist consumers in understanding this report:

- **Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- **Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.
- **Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
- **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
- **Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring, reporting and water treatment requirements.
- **Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
- **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

- **ppm** - parts per million or milligrams per Liter (mg/L). Equivalent to: one second in twelve days.
- **ppb** - parts per billion or micrograms per Liter (ug/L). Equivalent to: one second in thirty-two years.
- **ppt** - parts per trillion or nanograms per Liter (ng/L). Equivalent to: one second in three hundred seventeen centuries.
- **pCi/L** - Picocuries per Liter, a measure of radioactivity.
- **TON** - Threshold Odor Number. A number indicating the greatest dilution of a water sample.
- **NTU** - Nephelometric Turbidity Unit. The cloudiness in the water sample.
- **Micromhos** - Unit of electrical conductance.

Contaminants Requiring Special Consideration

Certain contaminants pose more risk than others and certain groups or individuals may be at greater risk than others. The following information defines contaminants that deserve special consideration, to help consumers make informed decisions regarding their drinking water.

Cryptosporidium

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes Cryptosporidium, the most commonly-used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the occasional presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people, infants and small children, and the elderly are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Nitrate

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six 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 10 mg/L 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 seek advice from your health care provider.

Lead

In 2017, all community water systems supplying potable water to school sites were required to test the school's potable water system for lead upon written request from the school. CVWD received requests from and tested a total of 25 schools in its service area. 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 (or commercial) plumbing pipes and fixtures. There are no known lead service lines in CVWD's service area. CVWD's source waters do not contain any naturally occurring lead. CVWD is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information about lead in drinking water, testing methods and steps you can take to minimize exposure are available from the Safe Drinking Water Hotline or at http://www.epa.gov/lead.

More Information Available

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 (1-800-426-4791) or go to http://water.epa.gov/drink/index.cfm.

Special Precautions

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

Stay Informed

CVWD encourages customers to stay informed by attending our regularly scheduled Board meetings, which are held on the 2nd and 4th Tuesday of each month at 6:00pm at CVWD; 10440 Ashford Street, Rancho Cucamonga, 91730. Meeting agendas can be found at CVWDwater.com. If you have any questions regarding this Report, please contact: Jeremy Strickland, Water Quality Coordinator, at (909) 987-2591.

NOTICIA IMPORTANTE

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

Table 1 - Contaminants Regulated by **Primary Drinking Water Standards**

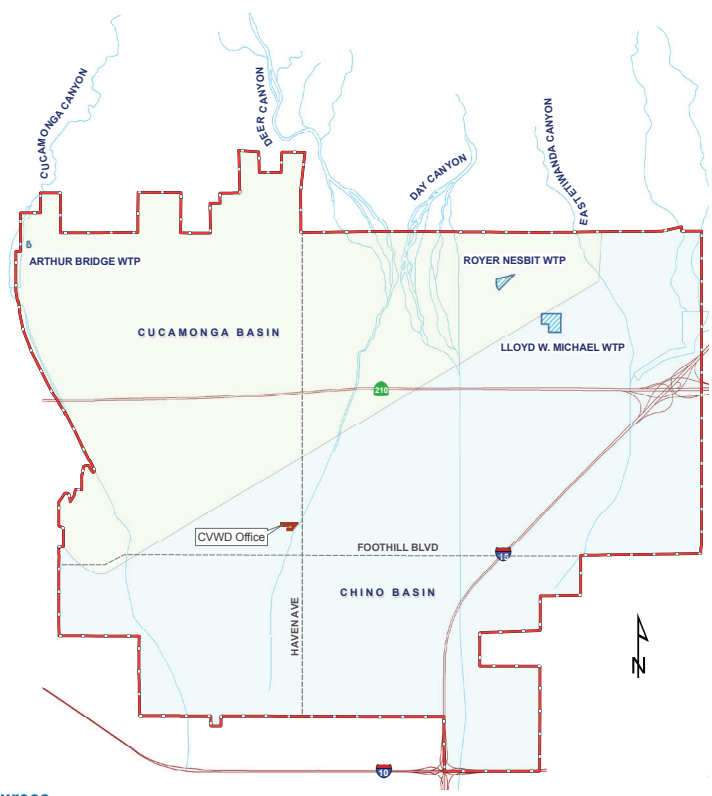
Constituent	Units	Primary MCL [MRDL]	PHG (MCLG) [MRDLG]	Detected Range	Average	Major Sources in Drinking Water
Aluminum (Al)	ppm	1	0.6	0 - 0.12	0.04	Erosion of natural deposits; residual from some surface water treatment processes
Barium (Ba)	ppm	1	2	0.021 - 0.033	0.03	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (Total Cr)	ppb	50		0 - 0.28	0.09	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Dibromochloropropane (DBCP)	ppt	200	1.7	0 - 54	4.89	Banned nematocide that may still be present in soils due to runoff/leaching from former use on soybeans, cotton, vineyards, tomatoes, and tree fruit
Fluoride (F)	ppm	2	1	0 - 0.59	0.23	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (NO3-N)	ppm	10	10	0 - 6.3	2.43	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate (Low Level)	ppb	6	1	0 - 3	0.75	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts
Selenium (Se)	ppb	50	30	0 - 0.58	0.10	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Total Alpha	pCi/L	15		0.066 - 6.81	1.72	Erosion of natural deposits
Disinfectant, Disinfectant Byproducts & Precursors						
Chlorine Residual (free)	ppm	4	4	0.21 - 1.53	0.70	Drinking water disinfectant added for treatment
Haloacetic Acids (HAA5)	ppb	60	N/A	0 - 26	21	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	ppb	80	N/A	0 - 86	65	Byproduct of drinking water disinfection
Total Organic Carbon	ppm	TT	N/A	0.88 - 3.4	2.06	Various natural and manmade sources
Filtration Performance & Microbiological						
Turbidity	As Indicated	TT	N/A	100% (< 0.3 NTU)	0.08	Soil runoff. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system
Total Coliform	% Positive	< 5%	0	0 - 0.81	0.81 (maximum)	Naturally present in the environment
Lead & Copper (2018)						
Lead	ppb	15 (Action Level)	0.2	2 (90th percentile value)	(0 of 50 samples exceeded AL)	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper	ppm	1.3 (Action Level)	0.3	0.09 (90th percentile value)	(0 of 50 samples exceeded AL)	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2 - Contaminants Regulated by **Secondary Drinking Water Standards** (plus Sodium and Hardness)

Constituent	Units	Secondary MCL	Detected Range	Average	Major Sources in Drinking Water
Aluminum (Al)	ppb	0.2	0 - 0.12	0.04	Erosion of natural deposits; residual from some surface water treatment processes
Apparent Color (Unfiltered) Units	Units	15	0 - 3	0.01	Naturally-occurring organic materials
Chloride (Cl)	ppm	500	2 - 32	8.23	Runoff/leaching from natural deposits; seawater influence
Copper (Cu)	ppm	1	0 - 0.0035	0.00	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron (Fe)	ppb	300	0 - 160	55.50	Leaching from natural deposits; industrial wastes
Manganese (Mn)	ppb	50	0 - 11	1.21	Leaching from natural deposits
Odor Threshold at 60 degC	TON	3	1	1.00	Naturally-occurring organic materials
Specific Conductance	umhos/ cm	1600	230 - 360	303.33	Substances that form ions when in water; seawater influence
Sulfate	ppm	500	14 - 33	21.00	Runoff/leaching from natural deposits; industrial wastes
Total Filterable Residue/ TDS	ppm	1000	95 - 300	205.80	Runoff/leaching from natural deposits
Turbidity (distribution system)	NTU	5	0 - 0.9	0.01	Soil runoff
Sodium	ppm		7.9 - 21	12.78	"Sodium" refers to the salt present in the water and is generally naturally occurring
Total Hardness (as CaCO3)	ppm		55.4 - 170	126.90	"Hardness" is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring

Table 3 - Unregulated Contaminants

Constituent	Units	Notification Level	Detected Range	Average
Quinoline	ppb	N/A	0 - 0.033	0.00



CVWD Water Sources