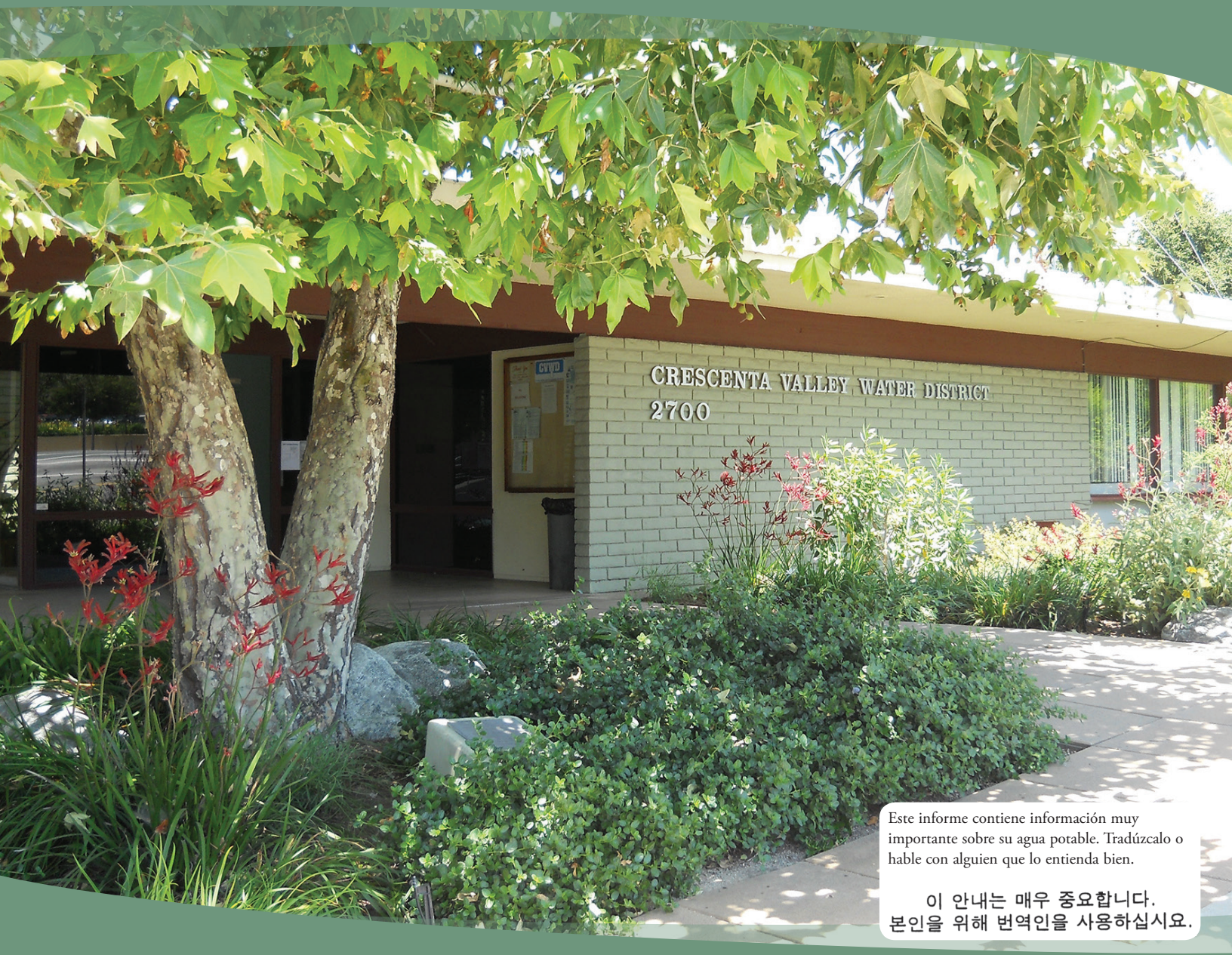
ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2016



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

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시요.

Presented By

Crescenta Valley Water District

PWS ID#: 1910028

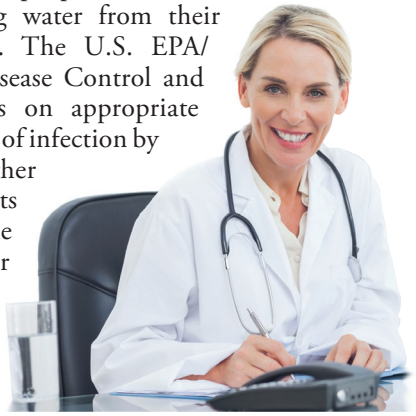
Working Hard For You

Crescenta Valley Water District (CVWD) is proud to present its annual water quality report covering the period between January 1 and December 31, 2016. Drinking water is now exponentially safer and more reliable than at any other point in human history. CVWD's exceptional staff continues to work hard every day to deliver the highest quality drinking water without interruption. Although the challenges ahead are many, we feel that by investing in public outreach and education, updating treatment technologies, water system upgrades, and training, the payoff will result in reliable, high-quality tap water delivered to you and your family.

The District provides customers with safe, reliable drinking water. For less than $5.00 you are purchasing District water in a quantity equivalent to 7,500 16.9 oz. bottles of bottled water.

Important Health Information

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.

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. State Board regulations 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.

Public Meetings

The District is governed by a five-member Board of Directors elected at-large who meet the 1st and 3rd Tuesdays of each month at CVWD's administration office. Public input is encouraged. Information regarding the District's Board meetings and upcoming events can be found on the District's 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 advertised and posted on the District's website and at the District's Administration Office at 2700 Foothill Boulevard.

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them, we would not be able to live healthy lives. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that could cause disease.

In 2016, the U.S. EPA passed a new regulation called the Revised Total Coliform Rule, which requires additional steps that water systems, like CVWD, must take in order to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and *E. coli*. The revised rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have in place procedures that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment of their system and correct any problems quickly. The U.S. EPA anticipates greater public health protection under the new regulation due to its more preventive approach to identifying and solving problems that may affect public health.

Although we have been fortunate to have the highest quality drinking water, our goal is to eliminate all potential pathways of contamination into our distribution system, and this new rule helps us to accomplish that goal.

Source Water Description

In 2016, approximately 52% of CVWD's source water came from local ground water supply in the Verdugo Basin. The majority of CVWD's ground water wells are located along the Verdugo Wash, south of Honolulu Avenue. The District's new well, Well 16, which was placed into service in March 2016, produced 18% of the total ground water.

The remaining 48% of CVWD's source water 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 and the Colorado River via the Colorado River Aqueduct, which carries water 242 miles from Lake Havasu to Lake Mathews in Riverside, CA.

In emergency situations, an interconnection between CVWD and the City of Glendale can be used to supply water to District customers. Currently, another interconnection between CVWD and the Los Angeles Department of Water and Power is being put into place to further ensure the District's water system's reliability.

The District supplied approximately 1.2 billion gallons of water in the 2016 calendar year. Water use was up just 4% from 2015. Customers did a tremendous job conserving water during the State's historical drought. 2015 water use was down 20% from 2013, which is the baseline year for calculating water conservation targets.

Source Water Assessment

A source water assessment was conducted for all active sources utilized by CVWD in August 2002. These water sources are considered vulnerable to known or unknown contaminant plumes associated with automobile body and repair shops, gas stations, sewer collection systems, historic gas stations, furniture repair/manufacturing, dry cleaners, and historic waste dumps/landfills.

Currently, the district is planning to complete an updated source water assessment. A partial assessment was done in late 2015 with the installation of Well 16.

A copy of the completed assessment may be viewed at the Drinking Water Field Operations Branch, 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.

Treatment

CVWD is required by the State Water Resources Control Board (SWRCB), Division of Drinking Water, to test its ground water for organic chemicals, minerals, metals, and bacteria. It is also required to 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 their treated surface water.

Local ground water is disinfected with chlorine before blending with MWD's imported surface water. The Verdugo Basin ground water contains nitrates, which is likely due to old septic systems and historical agricultural practices in the Crescenta Valley. CVWD treats some of the ground water through a nitrate removal process at CVWD's Glenwood Facility. The remaining ground water is blended with imported surface water to lower the nitrate levels below the maximum contaminant level (MCL). The blend of imported surface water and ground water delivered to your residence depends upon where you live in the community 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 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 or at www.epa.gov/lead.

Information on the Internet

The U.S. EPA (https://goo.gl/TFAMKc) and the Centers for Disease Control and Prevention (www.cdc.gov) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the Division of Drinking Water and Environmental Management has a website (https://goo.gl/kGepu4) that provides complete and current information on water issues in California, including valuable information about our watershed.

Fact or Fiction

A person can live about a month without food, but only about a week without water. *(Fact: Dehydration symptoms generally become noticeable after only 2% of one's normal water volume has been lost.)*

A person should consume a half-gallon of water daily to live healthily. *(Fact: A person should drink at least 64 ounces, or 8 cups, of water each day.)*

Methods for the treatment and filtration of drinking water were developed only recently. *(Fiction: Ancient Egyptians treated water by siphoning water out of the top of huge jars after allowing the muddy water from the Nile River to settle. And, Hippocrates, known as the father of medicine, directed people in Greece to boil and strain water before drinking it.)*

There is the same amount of water on Earth now as there was when the Earth was formed. *(Fact: The water that comes from your faucet could contain molecules that dinosaurs drank!)*

A typical shower with a non-low-flow showerhead uses more water than a bath. *(Fiction: A typical shower uses less water than a bath.)*

About half the water treated by public water systems is used for drinking and cooking. *(Fiction: Actually, the amount used for cooking and drinking is less than 1% of the total water produced!)*

One gallon of gasoline poured into a lake can contaminate approximately 750,000 gallons of water. *(Fact)*

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 her at cjscott@cvwd.com.

What type of container is best for storing water?

Consumer Reports has consistently advised that glass or BPA-free plastics such as polyethylene are the safest choices. To be on the safe side, do not use any container with markings on the recycle symbol showing "7 PC" (code for BPA). You could also consider using stainless steel or aluminum with BPA-free liners.

How much emergency water should I keep?

Typically, 1 gallon per person per day is recommended. For a family of four, that would be 12 gallons for 3 days. Humans can survive without food for 1 month, but can only survive 1 week without water.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria prior to filling up with the tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

How long does it take a water supplier to produce one glass of drinking water?

It could take up to 45 minutes to produce a single glass of drinking water.

How many community water systems are there in the U.S.?

About 53,000 public water systems across the United States process 34 billion gallons of water per day for home and commercial use. Eighty-five percent of the population is served by these systems.

Which household activity wastes the most water?

Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40% of total water use). Toilets use about 4 to 6 gallons per flush, so consider an ultra-low-flow (ULF) toilet, which requires only 1.5 gallons.

Test Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; 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.

REGULATED SUBSTANCES

				Crescenta Valley Water District		Imported water from Metropolitan Water District's F.E. Weymouth Plant (MWD)			
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)	2016	1	0.6	ND	NA	0.159	0.077–0.220	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2016	10	0.004	0.23	ND–3.5	ND	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2016	1	2	0.104	0.039–0.130	0.144	0.144–0.144	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Control of DBP precursors [TOC] (Units)	2016	TT	NA	NA	NA	2.5[1]	1.7–2.8[1]	No	Various natural and man-made sources
Fluoride (ppm)	2016	2.0	1	0.45[2]	0.21–0.59	0.7[3]	0.6–1.0	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2014	15	(0)	5.5	4.0–7.7	ND[4]	ND–4[4]	No	Erosion of natural deposits
Gross Beta Particle Activity[5] (pCi/L)	2016	50	(0)	NA	NA	5	4–6	No	Decay of natural and man-made deposits
Haloacetic Acids (ppb)	2016	60	NA	17.1	10–29	14[6]	4.5–25	No	By-product of drinking water disinfection
Hexavalent Chromium (ppb)	2016	10	0.02	0.59	ND–2.10	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)	2016	13	13	ND	NA	ND	NA	No	Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories
Nickel (ppb)	2016	100	12	1.4	ND–17	ND	NA	No	Erosion of natural deposits; discharge from metal factories
Nitrate [as nitrate] (ppm)	2016	45	45	19.8[7]	10.2–29.7	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2016	50	30	0.39	ND–7.2	ND	NA	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [Total Trihalomethanes][8] (ppb)	2016	80	NA	55	30–98	42[6]	26–61	No	By-product of drinking water disinfection
Tetrachloroethylene [PCE] (ppb)	2016	5	0.06	0.71[7]	ND–1.0	ND[1]	NA[1]	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Total Coliform Bacteria (Positive samples)	2016	TT	NA	1	NA	NA	NA	No	Naturally present in the environment
Uranium (pCi/L)	2014	20	0.43	3.8	1.2–6.8	3[4]	2–3[4]	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%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppb)	2014	1,300	300	500	0/38	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2014	15	0.2	2.4	0/38	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				Crescenta Valley Water District		Imported water from Metropolitan Water District's F.E. Weymouth Plant (MWD)			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2016	200	NS	ND	NA	159	77–220	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2016	500	NS	74	34–90	103	103–103	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2016	15	NS	1	1–1	1	1–1	No	Naturally occurring organic materials
Copper (ppm)	2016	1.0	NS	0.00066	ND–0.012	ND	NA	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Corrosivity (Units)	2016	Non-corrosive	NS	ND	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)	2016	300	NS	3.49	ND–64	ND	NA	No	Leaching from natural deposits; industrial wastes
Methyl tert-Butyl Ether [MTBE] (ppb)	2016	5	NS	ND	NA	ND	NA	No	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor–Threshold (Units)	2016	3	NS	1	1–1	2	2–2	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2016	1,600	NS	802	526–893	1,035	1,020–1,050	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2016	500	NS	104	63–120	258	256–259	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2016	1,000	NS	536	350–610	655	650–659	No	Runoff/leaching from natural deposits
Turbidity (Units)	2016	5	NS	0.19	0.14–0.93	ND	NA	No	Soil runoff
Zinc (ppm)	2016	5.0	NS	0.0018	ND–0.054	ND	NA	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED AND OTHER SUBSTANCES [9]

		Crescenta Valley Water District		Imported water from Metropolitan Water District's F.E. Weymouth Plant (MWD)		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Boron (ppb)	2016	ND	NA	150	150–150	Runoff/leaching from natural deposits; industrial wastes
Alkalinity (ppm)	2016	159	130–180	118	113–124	Naturally occurring
Calcium (ppm)	2016	83	51–93	77	75–79	Naturally occurring
Chlorate (ppb)	2016	NA	NA	60	21–60	By-product of drinking water chlorination; industrial processes
Hardness as CaCO3 [10] (ppm)	2016	335	200–380	300	293–306	Leaching from natural deposits
Magnesium (ppm)	2016	32	18–35	26	25–27	Naturally occurring
pH (Units)	2016	7.6 [7]	7.2–8.2	8.1	8.1–8.1	Naturally occurring
Chloroform (ppb)	2016	1.0	0.9–3.8	NS	NS–NS	By-product of drinking water disinfection

UNREGULATED AND OTHER SUBSTANCES [9]

		Crescenta Valley Water District		Imported water from Metropolitan Water District's F.E. Weymouth Plant (MWD)		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Potassium (ppm)	2016	3.3	3.1–4.1	5.1	5.0–5.1	Naturally occurring
Sodium (ppm)	2016	34	31–39	105	104–106	Runoff/leaching from natural deposits; seawater influence
Vanadium (ppb)	2016	0.43	ND–3.4	ND	NA	Erosion of natural deposits

[1] Sampled in 2015.
[2] The results reported for fluoride are from samples collected within the District's distribution system and reflect fluoride values after the water has been blended with imported water from MWD.
[3] Metropolitan was in compliance with all provisions of the State's Fluoridation System Requirements.
[4] Sampled in 2016.
[5] The State Water Resources Control Board considers 50 pCi/L to be the level of concern for beta particles.
[6] This data represents the treatment plant specific core locations per the State-approved monitoring plan.
[7] Results reported 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 systems, and may have an increased risk of getting cancer.
[9] 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.
[10] To convert the data from mg/L, or ppm, CaCO3 hardness to grains per gallons hardness, divide the average by 17.1 (335 / 17.1 = 19.6 grains per gallon).

Definitions

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

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).

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