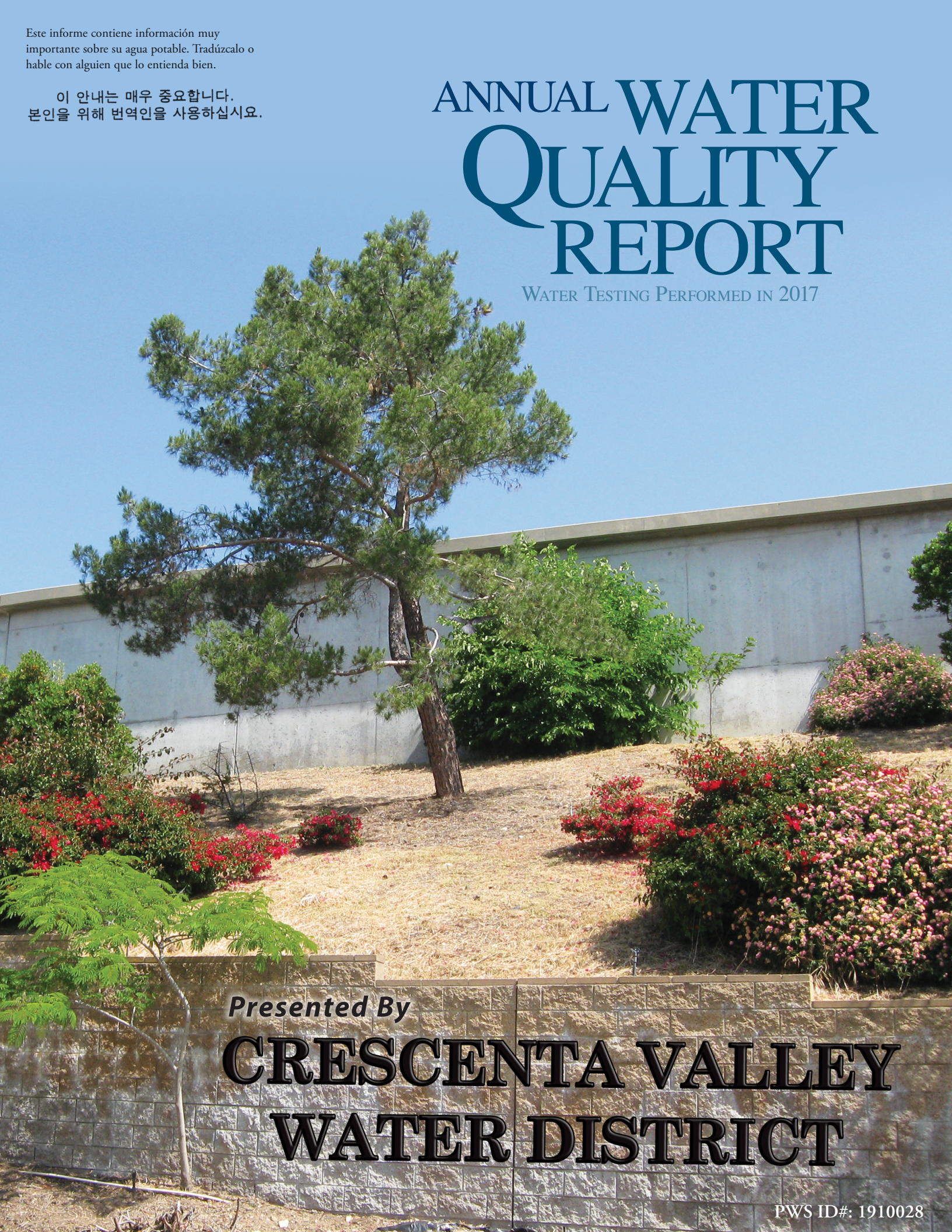
Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

이 안내는 매우 중요합니다.
본인을 위해 번역인을 사용하십시요.

ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017



Presented By

CRESCENTA VALLEY WATER DISTRICT

PWS ID#: 1910028

Quality First

Once again, we are pleased to present our annual water quality report. As in years past, we are committed to delivering the highest-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water-use efficiency, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best partners.

Source Water Description

In 2017, approximately 44% of CVWD's source water came from local ground water supply in the Verdugo Basin. The majority of CVWD's groundwater wells are located along the Verdugo Wash, south of Honolulu Avenue. This is a decrease over last year's ground water production due to low water levels in the Verdugo Basin.

The remaining 56% 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.

The District supplied approximately 1.2 billion gallons of water in the 2017 calendar year. Water use was up just 4% from 2016, which was the same increase as between the 2015 to 2016 calendar year. Because water usage has increased and ground water production has decreased, the costs of purchasing imported water have risen sharply over the last two years.

The Verdugo Ground Water Basin has not yet recovered from the what was one of the worst droughts on record, with 2011-2014 being the driest in California since record keeping started.

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 constructed and tested. This will further ensure the District's water system's reliability.

Public Meetings

The District is governed by a five-member Board of Directors elected at-large who meet the 2nd and 4th 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 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.

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.

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.

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.

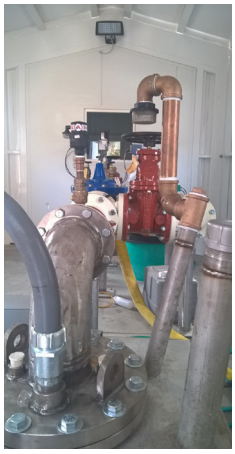
Contaminants that may be present in source water include:

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

Inorganic Contaminants, such as salts and metals, which 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, which 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, which can be naturally occurring or can be the result of oil and gas production and mining activities.

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

Source Water Assessment

A source water assessment was conducted for all active sources used 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 that a summary of the assessment be sent to you 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 on where you live in the community and the time of year.

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.

Benefits of Chlorination

Disinfection, a chemical process used to control disease-causing microorganisms by killing or inactivating them, is unquestionably the most important step in drinking water treatment. By far, the most common method of disinfection in North America is chlorination.

Before communities began routinely treating drinking water with chlorine (starting with Chicago and Jersey City in 1908), cholera, typhoid fever, dysentery, and hepatitis A killed thousands of U.S. residents annually. Drinking water chlorination and filtration have helped to virtually eliminate these diseases in the United States. Significant strides in public health are directly linked to the adoption of drinking water chlorination. In fact, the filtration of drinking water plus the use of chlorine is probably the most significant public health advancement in human history.

How chlorination works:

Potent Germicide Reduction in the level of many disease-causing microorganisms in drinking water to almost immeasurable levels.

Taste and Odor Reduction of many disagreeable tastes and odors like foul-smelling algae secretions, sulfides, and odors from decaying vegetation.

Biological Growth Elimination of slime bacteria, molds, and algae that commonly grow in water supply reservoirs, on the walls of water mains, and in storage tanks.

Chemical Removal of hydrogen sulfide (which has a rotten egg odor), ammonia, and other nitrogenous compounds that have unpleasant tastes and hinder disinfection. It also helps to remove iron and manganese from raw water.

BY THE NUMBERS

34 BILLION — The number of gallons of water produced daily by public water systems in the U.S.

1 MILLION — The number of miles of drinking water distribution mains in the U.S.

135 BILLION — The amount of money spent annually on maintaining the public water infrastructure in the U.S.

300 MILLION — The number of Americans who receive water from a public water system.

2 BILLION — The age in years of the world's oldest water found in a mine at a depth of nearly two miles.

151 THOUSAND — The number of active public water systems in the U.S.

What Causes the Pink Stain on Bathroom Fixtures?

The reddish pink color frequently noted in bathrooms on shower stalls, tubs, tile, toilets, sinks, toothbrush holders, and on pets' water bowls is caused by the growth of the bacterium *Serratia marcesens*. Serratia is commonly isolated from soil, water, plants, insects, and vertebrates (including man). The bacteria can be introduced into the house through any of the above-mentioned sources. The bathroom provides a perfect environment (moist and warm) for bacteria to thrive.

The best solution to this problem is to continually clean and dry the involved surfaces to keep them free from bacteria. Chlorine-based compounds work best, but keep in mind that abrasive cleaners may scratch fixtures, making them more susceptible to bacterial growth. Chlorine bleach can be used periodically to disinfect the toilet and help to eliminate the occurrence of the pink residue. Keeping bathtubs and sinks wiped down using a solution that contains chlorine will also help to minimize its occurrence.

Serratia will not survive in chlorinated drinking water.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily 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.

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)	2017	1	0.6	0.00273	ND–0.029	0.17	ND–0.21	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2017	10	0.004	2.73	ND–6.7	ND	NA	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	2017	1	2	0.111	0.018–0.14	ND	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2017	10	0.1	NA	NA	NA	2.6–5.0	No	By-product of drinking water disinfection
Control of DBP precursors [TOC] (Units)	2017	TT	NA	NA	NA	2.5	2.0–2.9	No	Various natural and man-made sources
E. coli (Positive samples)	2017	see footnote 1	(0)	2	NA	NA	NA	No	Human and animal fecal waste
Fluoride[2] (ppm)	2017	2.0	1	0.51	0.18–0.78	0.5	0.7–0.9	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity[3] (pCi/L)	2014	15	(0)	4.7	3.3–6.6	ND[4]	NA[4]	No	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2017	50	(0)	NA	NA	ND	NA	No	Decay of natural and man-made deposits
Haloacetic Acids (ppb)	2017	60	NA	21	3.4–37	6.8	4.0–10	No	By-product of drinking water disinfection
Hexavalent Chromium (ppb)	2017	NS[5]	0.02	0.50	ND–0.71	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)	2017	13	13	ND	NA	ND	NA	No	Leaking from underground gasoline storage tanks; discharge from petroleum and chemical factories
Nickel (ppb)	2017	100	12	NA	NA	ND	NA	No	Erosion of natural deposits; discharge from metal factories
Nitrate [as nitrate][6] (ppm)	2017	45	45	18.3	8.0–31.4	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2017	50	30	0.30	ND–8.7	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][7] (ppb)	2017	80	NA	64	41–81	21	9.9–33	No	By-product of drinking water disinfection
Tetrachloroethylene [PCE][6] (ppb)	2017	5	0.06	0.58	ND–0.7	ND	NA	No	Discharge from factories, dry cleaners, and auto shops (metal degreaser)

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
Total Coliform Bacteria (Positive samples)	2017	TT	NA	5	NA	NA	NA	No	Naturally present in the environment
Turbidity[8] (NTU)	2017	TT	NA	NA	NA	100	0.4–100	No	Soil runoff
Uranium (pCi/L)	2014	20	0.43	3.8	1.2–6.8	ND[4]	NA[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 (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

				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	EXCEEDANCE	TYPICAL SOURCE
Aluminum (ppb)	2017	200	NS	ND	2.7–29	170	ND–210	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2017	500	NS	77	14–100	48	29–66	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2017	15	NS	1.1	1–2	2	2–2	No	Naturally occurring organic materials
Copper (ppm)	2017	1.0	NS	0.001	ND–0.012	ND	NA	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Corrosivity (Units)	2017	Non-corrosive	NS	NA	NA	12.0	11.9–12.1	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors
Iron[9] (ppb)	2017	300	NS	663	ND–8,000	ND	NA	Yes	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2017	50	NS	1	ND–12	NA	NA	No	Leaching from natural deposits
Methyl tert-Butyl Ether [MTBE] (ppb)	2017	5	NS	ND	NA	ND	NA	No	Leaking underground storage tanks; discharge from petroleum and chemical factories
Odor–Threshold (Units)	2017	3	NS	0.13	ND–1	3	3–3	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2017	1,600	NS	796	390–882	460	299–621	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2017	500	NS	113	41–130	84	46–123	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2017	1,000	NS	539	350–620	272	179–364	No	Runoff/leaching from natural deposits
Turbidity (Units)	2017	5	NS	0.27	0.12–1.78	ND	NA	No	Soil runoff
Zinc (ppm)	2017	5.0	NS	0.012	ND–0.063	ND	NA	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED AND OTHER SUBSTANCES [10]

		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
Alkalinity (ppm)	2017	157	140–170	57	43–71	Naturally occurring
Boron (ppb)	2017	7.8	ND–83	110	110–110	Runoff/leaching from natural deposits; industrial wastes
Calcium (ppm)	2017	87	54–96	24	14–35	Naturally occurring
Chlorate (ppb)	2017	NA	NA	34	34–34	By-product of drinking water chlorination; industrial processes
Chloroform (ppb)	2017	1.3	0.9–6.2	ND[11]	ND[11]	By-product of drinking water disinfection
Hardness as CaCO3 (ppm)	2017	350[12]	170–380	105	58–152	Leaching from natural deposits
Magnesium (ppm)	2017	32	15–36	11	6.2–16	Naturally occurring
pH (Units)	2017	7.6[6]	7.0–8.1	8.5	8.4–8.7	Naturally occurring
Potassium (ppm)	2017	3.5	3.2–4.5	2.7	2.2–3.2	Naturally occurring
Sodium (ppm)	2017	36	24–44	50	35–64	Runoff/leaching from natural deposits; seawater influence
Vanadium (ppb)	2017	0.86	ND–4.3	ND	NA	Erosion of natural deposits

[1] Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or the system fails to take repeat samples following *E. coli*-positive routine sample, or the system fails to analyze total coliform-positive repeat sample for *E. coli.*
[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] The data collected are from 2014, with the exception of Well 8, which was collected in 2017.
[4] Sampled in 2017.
[5] There is currently no MCL for hexavalent chromium. The previous MCL of 10 ppb was withdrawn on September 11, 2017.
[6] Results reported represent samples collected within the District's distribution system.
[7] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or their central nervous system, and may have an increased risk of getting cancer.
[8] Turbidity is a measure of the cloudiness of the water. MWD monitors it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
[9] Samples collected in the distribution system did not contain iron above the Secondary MCL of 300. The high result of 8,000 ppb reported was a one time incident that occurred when the well was initially started.
[10] Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.
[11] Sampled in 2016.
[12] To convert the data from mg/L CaCO3 hardness to grains per gallons hardness, divide the average by 17.1 (350 / 17.1 = 20.5 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

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).

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