

VALLEY WATER COMPANY

2018 CONSUMER CONFIDENCE REPORT

INTRODUCTION

Valley Water Company (Valley Water) is committed to keeping you informed about the quality of your drinking water. This report is provided to you annually. It includes information describing where your drinking water comes from, the constituents found in your drinking water and how the water quality compares with the regulatory standards. We are proud to report that during 2018, the drinking water provided by Valley Water met or surpassed all Federal and State drinking water standards. We remain dedicated to providing you with a reliable supply of high quality drinking water.

Valley Water, a mutual water company, serves approximately 10,000 people in the eastern section of La Cañada Flintridge, bordering the City of Pasadena to the east and the City of Glendale to the south. As a mutual water company, the shareholders are its customers who are served by its distribution system. A five-person Board of Directors oversees the company's operations. The Board is scheduled to meet on the third Friday in January, February, June, and October at 9:00 am. An annual shareholders' meeting is held on a Saturday in April. All meetings are at the company office located at 4524 Hampton Road, La Cañada Flintridge, California 91011. For more information, you may contact Mr. Bob Fan, General Manager, at 818-790-5516.

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción , favor de contactar a Mr. Bob Fan. Telefono: 818-790-5516.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

WHERE DOES MY DRINKING WATER COME FROM?

In 2018, Valley Water distributed approximately 3,450 acre-feet of water to its customers. This is equivalent to about 1,120 million gallons. One acre-foot is enough water to cover one acre of land, one foot deep with water, or approximately 325,900 gallons. About thirty-two percent of the water came from two wells pumping from the Raymond groundwater basin and sixty-eight percent was purchased from the Metropolitan Water District of Southern California (MWD), a regional wholesaler of imported surface water. MWD's water is a blend of Colorado River water delivered through MWD's Colorado River Aqueduct and surface water from Northern California delivered through the State of California Water Project Aqueduct. MWD's water is filtered and disinfected at the Weymouth Filtration Plant in La Verne. Chlorine disinfectant is added to all water served by Valley Water to kill microorganisms and prevent re-growth of bacteria in storage reservoirs and distribution pipelines.

In 2018, during January, February, April, and December, Valley Water delivered 100 percent imported water purchased from MWD. During March and May through November, Valley Water pumped groundwater and mixed it with imported water from MWD.

DRINKING WATER SOURCE ASSESSMENT

In accordance with the Federal Safe Drinking Water Act, an assessment of the drinking water sources for Valley Water was completed in September 2002. The purpose of the drinking water source assessment is to promote source water protection by identifying types of activities in the proximity of the drinking water sources which could pose a threat to the water quality. The assessment concluded that Valley Water's groundwater sources are considered most vulnerable to the following activities or facilities associated with contaminants detected in the water supply: known contaminant plumes, dry cleaners, gasoline stations, chemical/petroleum processing/storage, automobile repair shops, photograph processing/printing, and research laboratories. In addition, the groundwater sources are considered most vulnerable to the following facility not associated with contaminants detected in the water supply: transportation corridors – freeway/state highways. A copy of the complete assessment is available at Valley Water Company at 4524 Hampton Road, La Cañada Flintridge, California 91011. You may request a summary of the assessment to be sent to you by contacting Mr. Bob Fan, General Manager, at 818-790-5516.

Every five years, MWD is required by the State Water Resources Control Board, Division of Drinking Water (DDW) to examine possible sources of drinking water contamination in its State Water Project and Colorado River source waters. The most recent watershed sanitary surveys of MWD's source water supplies from the Colorado River was updated in 2015 and the State Water Project was updated in 2016. Water from the Colorado River is considered to be most vulnerable to contamination from recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. Water supplies from Northern California's State Water Project are most vulnerable to contamination from urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater. The United States Environmental Protection Agency (USEPA) also requires MWD to complete one Source Water Assessment (SWA) that utilizes information collected in the watershed sanitary surveys. MWD completed its SWA in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. A copy of the most recent summary of either Watershed Sanitary Survey or the SWA can be obtained by calling MWD at (800) CALL-MWD.

WHAT ARE WATER QUALITY STANDARDS?

USEPA and DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems to ensure that tap water is safe to drink. 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 standards established by USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

- **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.
- **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.
- **Secondary MCLs** are set to protect the odor, taste, and appearance of drinking water.
- **Primary Drinking Water Standard:** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
- **Treatment Technique:** A required process intended to reduce the level of a contaminant in drinking water.
- **Regulatory Action Level (AL):** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.

WHAT IS A WATER QUALITY GOAL?

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- **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 USEPA.
- **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.
- **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.

WHAT CONTAMINANTS MAY BE PRESENT IN SOURCES OF DRINKING 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.

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 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.
- **Radioactive contaminants** that can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural applications, and septic systems.

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).

WHAT IS IN MY DRINKING WATER?

Your drinking water is tested by certified professional water system operators and certified laboratories to ensure its safety. Valley Water routinely tests drinking water from its wells, treatment facility, and distribution system pipes for bacterial and chemical contaminants while MWD is responsible for testing its treated surface water purchased by Valley Water. The chart in this report shows the average and range of concentrations of the constituents tested in your drinking water during year 2018 or from the most recent tests. The State allows Valley Water to monitor for some contaminants less than once per year because the concentrations of these contaminants in groundwater do not change frequently. Some of our data, although representative, are more than one year old. The chart lists all the contaminants **detected** in your drinking water that have Federal and State drinking water standards. Detected unregulated contaminants of interest are also included.

Most chemicals detected in our groundwater and surface water sources occur in your drinking water from erosion of natural deposits in soils. However, several detected contaminants are present in tap water as the result of the treatment process itself, corrosion of plumbing fixtures, or from industrial/agricultural discharges:

- **Aluminum in the MWD treated surface water** comes from a treatment chemical used to assist in the removal of soil particles and microorganisms.
- **Trihalomethanes (THMs) and Haloacetic Acids (HAAs) are byproducts of drinking water treatment** that form when chlorine is added to disinfect the water. These chemicals are monitored in the distribution system. During the winter months, disinfected imported water containing small amounts of these disinfection byproducts is injected back into the groundwater basin as a way to store water for use during the hot, summer months. These THMs and HAAs are detected in the water pumped from our wells; however the concentrations are below the MCL.
- **Nitrate in groundwater** could come from fertilizers or leakage from old septic tanks. Groundwater is blended to meet the MCL for Nitrate. Nitrate concentrations are high at some of our wells while imported water from MWD is generally low in nitrate concentrations. Because the air stripping treatment plant cannot remove nitrate, treated groundwater is blended with imported water from MWD before being delivered to you. Nitrate in the blended water is monitored every 10 minutes with an on-line nitrate analyzer. Nitrate concentrations in the blended water were below the MCL of 10 parts per million (ppm) during 2018. The source of the elevated nitrate could be septic tanks or nitrogen fertilizers. Nitrate in drinking water at levels above the MCL of 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 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 for advice from your health care provider.
- **The groundwater pumped from our wells contains the volatile organic solvents** Tetrachloroethylene (PCE) and Trichloroethylene (TCE). In 1992, Valley Water constructed an air stripping treatment plant for the removal of the organic solvents, which allows Valley Water to use this important source of water supply. A condition of our permit to operate this plant states that the treatment process must remove all the volatile organic solvents to below detectable levels. PCE, TCE and the other volatile organic chemicals in the treatment water are monitored every week. PCE and TCE were **not detected** in any treated water samples tested during 2018.
- **Lead has not been detected in our groundwater or surface water sources;** however, lead in tap water can increase when water contacts plumbing materials in your home. 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 home plumbing. Valley Water 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 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: <https://www.epa.gov/lead>. Because domestic plumbing is the primary source of lead, drinking water regulations require testing tap water samples for lead inside a number of representative homes every three years. If more than 10 percent of the tap samples from homes exceed the Action Level set by the USEPA, the water system is required to treat the water in a way that reduces the corrosivity of the water. The most recent testing of lead in Valley Water's service area residences was completed in 2016 and none of the twenty samples collected and analyzed had a detectable level of lead.

Groundwater is protected from many infectious organisms, such as the parasite *Cryptosporidium*, by the natural filtration action of water percolating through soils. Current conventional surface water treatment methods remove most *Cryptosporidium* organisms when they are present, but 100 percent elimination cannot be guaranteed. MWD has detected *Cryptosporidium* in some areas of their watershed but has never detected the organism in its treated water. There is no evidence that *Cryptosporidium* has entered our water supply. **However, 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 can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) 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).

COLIFORM BACTERIA

This Consumer Confidence Report reflects changes in drinking water regulatory requirements during 2016. All water systems are required to comply with the state Total Coliform Rule. Effective April 1, 2016, all water systems are also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and *E. coli* bacteria). The USEPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these must be corrected by the water system.

DRINKING WATER FLUORIDATION

"Community water fluoridation continues to be the most cost-effective, practical and safe means for reducing and controlling the occurrence of tooth decay in a community." **U.S. Surgeon General**

In November 2007, MWD joined a majority of the nation's public water suppliers by adding fluoride to drinking water in order to prevent tooth decay. In line with recommendations from DDW, as well as the U.S. Centers for Disease Control and Prevention, MWD began adjusting the natural fluoride level in imported water, which ranges from non-detect to 0.3 parts per million (ppm), to the optimal range of 0.6 to 1.2 ppm. Fluoride levels in drinking water are limited under California state regulations at a maximum dosage of 2 ppm.

Fluoride has been added to U.S. drinking water supplies since 1945. Of the 50 largest cities in the U.S., 43 fluoridate their drinking water. There are many places to go for additional information about the fluoridation of drinking water. They include:

State Water Resources Control Board, Division of Drinking Water

http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml

American Dental Association

<http://www.ada.org/en/public-programs/advocating-for-the-public/fluoride-and-fluoridation>

American Water Works Association

<http://www.awwa.org/>

2018 VALLEY WATER COMPANY GROUNDWATER QUALITY

Chemical	MCL	PHG or (MCLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling	Typical Source
Primary Drinking Water Standards -- Health Related Standards							
Radiologicals							
Gross Alpha (pCi/L)	15	(0)	5.3	4.2 - 6.3	No	2014	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	7.9	6.8 - 8.9	No	2017	Erosion of natural deposits
Inorganic Chemicals							
Barium (ppm)	1	2	0.16	0.15 - 0.16	No	2017	Erosion of natural deposits
Fluoride (ppm)	2	1	0.26	0.26	No	2017	Erosion of natural deposits
Nitrate (ppm as N)	10	10	4.3	0.6 - 5.9	No	Tested Weekly	Fertilizers, Septic Tanks
Nitrate + Nitrite (ppm as N)	10	10	4.3	0.6 - 5.9	No	Tested Weekly	Fertilizers, Septic Tanks
Secondary Standards*							
Chloride (ppm)	500*	n/a	83	77 - 88	No	2018	Erosion of natural deposits
Odor (threshold odor number)	3*	n/a	1	1	No	2017	Naturally-occurring organic materials
Specific Conductance (µmho/cm)	1,600*	n/a	1,100	1,100	No	2017	Substances that form ions in water
Sulfate (ppm)	500*	n/a	100	91 - 110	No	2018	Erosion of natural deposits
Total Dissolved Solids (ppm)	1,000*	n/a	430	380 - 480	No	2018	Erosion of natural deposits
Unregulated Chemicals of Interest							
Calcium (ppm)	Not Regulated	n/a	109	106 - 112	n/a	2017	Erosion of natural deposits
Hardness, total as CaCO ₃ (ppm)	Not Regulated	n/a	422	411 - 432	n/a	2017	Erosion of natural deposits
Magnesium (ppm)	Not Regulated	n/a	36.6	35.7 - 37.4	n/a	2017	Erosion of natural deposits
pH (pH units)	Not Regulated	n/a	7.3	7.2 - 7.4	n/a	2017	Hydrogen Ion Concentration
Potassium (ppm)	Not Regulated	n/a	3.1	3.1	n/a	2017	Erosion of natural deposits
Sodium (ppm)	Not Regulated	n/a	45	45	n/a	2017	Erosion of natural deposits
MCL = Maximum Contaminant Level; MCLG = federal MCL Goal; n/a = not applicable; ND = not detected; PHG = California Public Health Goal; ppb = parts-per-billion; ppm = parts-per-million; pCi/L = picoCuries per liter; µmho/cm = micromhos per centimeter * Chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).							

2018 VALLEY WATER COMPANY DISTRIBUTION SYSTEM WATER QUALITY

Bacterial Quality	MCL	MCLG	Highest Monthly Number Positive	MCL Violation?	Most Recent Sampling	Typical Source of Contaminant	
Total Coliform Bacteria	1	0	1	No	2018	Naturally present in the environment	
No more than one of the monthly samples may be positive for total coliform bacteria. One sample collected in September 2018 was positive for total coliform. However, fecal coliform/E.coli was not detected.							
Chemical	MCL (MRDL)	PHG or (MRDLG)	Average Amount	Range of Detections	MCL Violation?	Most Recent Sampling	Typical Source
Total Trihalomethanes (ppb) [1]	80	n/a	64	23 - 77	No	Tested Quarterly	Byproducts of chlorine disinfection
Haloacetic Acids (ppb) [1]	60	n/a	22	3.9 - 25	No	Tested Quarterly	Byproducts of chlorine disinfection
Chlorine Residual (ppm) [1]	(4)	(4)	1.4	0.3 - 2.2	No	Tested Weekly	Drinking water disinfectant
Odor (threshold odor number)	3*	n/a	1	1	No	Tested Monthly	Naturally present
Turbidity (NTU)	5*	n/a	0.11	ND - 0.2	No	Tested Monthly	Soil runoff
MCL = Maximum Contaminant Level; MCLG = federal MCL Goal; MRDL = Maximum Residual Disinfectant Level; MRDLG = Maximum Residual Disinfectant Level Goal; n/a = not applicable; NTU = nephelometric turbidity units; ppb = parts-per-billion; ppm = parts-per-million; PHG = California Public Health Goal; Two locations in the distribution system are tested quarterly for Total Trihalomethanes and Haloacetic Acids; five locations are tested monthly for color, odor, and turbidity. Color was not detected in 2018. [1] The highest 2018 running annual average is reported as average amount while the maximum and minimum of the individual results are reported as range of detections. MCL (or MRDL) compliance is based on the running annual average. * Chemical is regulated by a secondary standard to maintain aesthetic qualities (taste, odor, color).							

LEAD AND COPPER ACTION LEVEL AT RESIDENTIAL TAPS

Lead and Copper	Action Level (AL)	PHG	90th Percentile Value	Sites Exceeding AL / Number of Sites	Action Level Violation?	Typical Source
Lead (ppb)	15	0.2	ND	0/20	No	Corrosion of household plumbing
Copper (ppm)	1.3	0.3	0.11	0/20	No	Corrosion of household plumbing
Every three years, 20 residences are tested for lead and copper at-the-tap. The most recent set of samples was collected in 2016. Lead was not detected in any samples. Copper was detected in 8 samples; none exceeded the copper regulatory Action Level (AL). An AL is the concentration of a contaminant which if exceeded in more than ten percent of the samples, triggers treatment or other requirements that a water system must follow. The next set of lead and copper samples will be collected in 2019. During 2018, no school submitted a request to be sampled for lead.						

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA 2018 TREATED SURFACE WATER QUALITY

Chemical	MCL	PHG or (MCLG)	Average Amount	Range of Detections	MCL Violation ?	Most Recent Tests	Typical Source of Contaminant
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Primary Drinking Water Standards -- Health Related Standards

Inorganic Chemicals							
Aluminum (ppm)	1	0.6	0.11	ND - 0.22	No	2018	Water treatment process residue
Barium (ppm)	1	2	0.118	0.118	No	2018	Refinery discharge, erosion of natural deposits
Bromate (ppb)	10	0.1	5	ND - 10	No	2018	Byproduct of Drinking Water Disinfection
Fluoride (ppm)	2	1	0.7	0.6 - 0.9	No	2018	Treatment additive for dental health

Secondary Drinking Water Standards -- Aesthetic Standards, Not Health-Related

Aluminum (ppb)	200	600	110	ND - 220	No	2018	Water treatment process residue
Chloride (ppm)	500	n/a	96	96 - 97	No	2018	Runoff or leaching from natural deposits
Color (Color Units)	15	n/a	ND	ND - 1	No	2018	Naturally-occurring organic materials
Odor (threshold odor number)	3	n/a	3	3	No	2018	Naturally-occurring organic materials
Specific Conductance (µmho/cm)	1,600	n/a	954	897 - 1,010	No	2018	Substances that form ions in water
Sulfate (ppm)	500	n/a	213	190 - 236	No	2018	Runoff or leaching from natural deposits
Total Dissolved Solids (ppm)	1,000	n/a	596	553 - 639	No	2018	Runoff or leaching from natural deposits

Unregulated Chemicals

Hardness (ppm as CaCO3)	Not Regulated	n/a	254	233 - 274	No	2018	Runoff or leaching from natural deposits
Sodium (ppm)	Not Regulated	n/a	98	94 - 103	No	2018	Runoff or leaching from natural deposits

MCL = Maximum Contaminant Level; **MCLG** = federal MCL Goal; **n/a** = not applicable; **ND** = not detected;

PHG = California Public Health Goal; **ppb** = parts-per-billion; **ppm** = parts-per-million; **µmho/cm** = micromhos per centimeter

Turbidity - combined filter effluent Metropolitan Water District Weymouth Filtration Plant	Treatment Technique	Turbidity Measurements	TT Violation	Typical Source of Contaminant
1) Highest single turbidity measurement	0.3 NTU	0.06	No	Soil Runoff
2) Percentage of samples less than 0.3 NTU	95%	100%	No	Soil Runoff

Turbidity is a measure of the cloudiness of the water, an indication of particulate matter, some of which might include harmful microorganisms. Low turbidity in Metropolitan's treated water is a good indicator of effective filtration. Filtration is called a "**treatment technique**" (TT). A treatment technique is a required process intended to reduce the level of contaminants in drinking water that are difficult and sometimes impossible to measure directly. **NTU** = nephelometric turbidity units