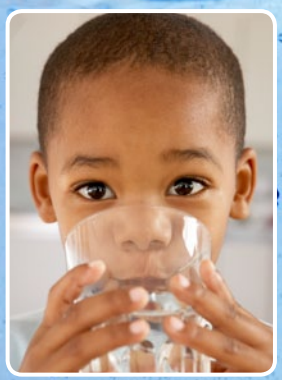
Golden State
Water Company
A Subsidiary of American States Water Company

2017

San Dimas Water System

Consumer Confidence Report on Water Quality for 2016




Providing Quality Drinking Water in California Since 1929

Golden State Water Company is pleased to present our Annual Water Quality Report for 2016.

Bringing you clean drinking water is serious business, and our team of more than 500 water professionals is committed to ensuring you have reliable, high-quality water service available whenever you need it.

It is important for our customers to remain informed about the quality of the water that you and your family drink. You should rest assured knowing that Golden State Water tests water delivered to its customers to ensure it meets stringent quality standards.

Golden State Water strictly adheres to federal and state drinking water quality guidelines required by the United States Environmental Protection Agency (USEPA), the State Water Resources Control Board's Division of Drinking Water (DDW), and the California Public Utilities Commission (CPUC). We test for more than 230 elements in our water to ensure high quality. In 2016 alone, we invested more than half a million dollars on laboratory testing to meet regulatory standards.

In the uncommon event that drinking water standards are exceeded, we take immediate action to notify customers and restore normal service.

We pride ourselves on getting the job done right, and our team of experts strives to provide consistent water service and prevent water quality issues by regularly investing to maintain and improve our water system. This ensures our ability to provide you with high-quality drinking water—24 hours a day, seven days a week—is not compromised.

In January 2017, the State of California announced a new program encouraging schools to test their drinking water for the presence of lead. Golden State Water is proudly collaborating with schools in our service areas to test and ensure drinking water quality is not being compromised by plumbing issues within the school facilities. Supplying drinking water that complies with State and Federal requirements to families is of paramount importance, and we appreciate the opportunity to work closely with our local school administrators on this key initiative.

Our customers have always been our top priority, and we are always available to provide you with information or answer any questions you may have about your water service. We encourage customers to visit www.gswater.com and follow us on Twitter @GoldenStateH2O. In addition, Golden State Water's Customer Service Representatives are available around-the-clock for customers at 1.800.999.4033.

We have proudly served California for more than 85 years, and we currently provide water to approximately 1 million customers throughout the state. On behalf of the men and women at Golden State Water who serve you, thank you for being a valued customer.

Sincerely,

Robert Sprowls
President and Chief Executive Officer
Golden State Water Company

Benjamin Lewis
General Manager, Foothill District
Golden State Water Company

About the Company

Golden State Water Company, a subsidiary of American States Water Company (AWR), provides water service to approximately one million Californians located within 75 communities throughout 10 counties in Northern, Coastal and Southern California. The Company also distributes electricity to more than 24,000 customers in the Big Bear recreational area of California. AWR's contracted services subsidiary, American States Utility Services, Inc., provides operations, maintenance and construction management services for water and wastewater systems located on military bases throughout the country.

Making Conservation a Way of Life

After five consecutive dry years depleted California's water resources, steady rain and snowfall during the winter months have improved conditions at many of the state's reservoirs and contributed to statewide snowpack levels that are far above the historical average. This is great news for California's water situation; however, we must remain diligent with responsible water use and make water conservation a way of life. California has been prone to long stretches of drought, and there is no guarantee that long-range weather patterns will produce such an abundance of water to our state. To learn more about water-use efficiency and the conservation resources available in your area, please visit www.gswater.com/conservation or call 1.800.999.4033.

Where Does My Water Come From?

Water delivered to customers in the San Dimas System is a blend of groundwater pumped from the Main San Gabriel Basin and purchased water from Metropolitan Water District of Southern California, Three Valleys Municipal Water District, and Covina Irrigating Company. The Main San Gabriel Basin underlies the San Gabriel Valley from Alhambra to San Dimas.

Glossary of Terms

Maximum Contaminant Level (MCL)
The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the public health goals and maximum contaminant level goals as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste and appearance of drinking water.

California Notification Level (NL)
Non-regulatory, health-based advisory levels established by the Division of Drinking Water (DDW) for contaminants in drinking water for which an MCL has not been established.

Maximum Contaminant Level Goal (MCLG)
The level of contaminant in drinking water below which there is no known or expected risk to health. Maximum contaminant level goals are set by the United States Environmental Protection Agency (USEPA).

Maximum Residual Disinfectant Level (MRDL)
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the 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 and reporting requirements and water treatment requirements.

Public Health Goal (PHG)
The level of a contaminant in drinking water below which there is no known or expected risk to health. Public health goals are set by the California Environmental Protection Agency (CalEPA).

Regulatory Action Level (AL)
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Hydrant Flushing

Hydrant flushing is an essential maintenance procedure that all water providers must perform periodically to ensure the delivery of water that meets state and federal drinking water standards.

Flushing is a necessary part of maintaining the water system and the quality of the water within it. Golden State Water has modified procedures to minimize the amount of water released during flushing activities. Water used for flushing represents less than 1 percent of the total water usage in each of our water systems.

For more information about hydrant flushing, visit http://www.gswater.com/flushing-info/

If You Have Questions – Contact Us

For information about your water quality or to find out about upcoming opportunities to participate in public meetings, please contact our 24-hour Customer Service Center at 1-800-999-4033. Visit us online at www.gswater.com or email us at customerservice@gswater.com.

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

Cross Connection Control Program

Golden State Water's Cross Connection Control Program provides a level of certainty that the water in the company's distribution system is protected from possible backflow of contaminated water from commercial or industrial customers' premises. For additional information, visit http://www.gswater.com/protecting-our-drinking-water/.

For People with Sensitive Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people, such as those individuals with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly populations, and infants, can be particularly at risk from infections. These people should seek advice from their health care providers.

The USEPA and Centers for Disease Control issue guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants. To obtain a copy of these guidelines, please call the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

Connect with us to learn more!

Visit **www.gswater.com** to learn how to:

- Access the latest Water Quality Report for your area
- Get the latest updates and news regarding the drought and state/local restrictions
- Learn more about water-use efficiency, including programs and rebates in your area
- Understand your water bill and learn about payment options
- Obtain information about programs for low-income customers (CARW)
- Sign up to receive email updates about your water service.

For additional information, please contact our 24-hour Customer Service Center at **1-800-999-4033** or email us at customerservice@gswater.com.

Measurements

Water is sampled and tested consistently throughout the year to ensure the best possible quality.

Contaminants are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L)
- Parts per billion (ppb) or micrograms per liter (µg/L)
- Parts per trillion (ppt) or nanograms per liter (ng/L)
- Grains per gallon (grains/gal) – A measurement of water hardness often used for sizing household water softeners. One grain per gallon is equal to 17.1 mg/L of hardness.
- MicroSiemens per centimeter (µS/cm) – A measurement of a solution's ability to conduct electricity
- Nephelometric Turbidity Units (NTU) – A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.
- PicoCuries per liter (pCi/L) – A measurement of radioactivity in water.

If this is difficult to imagine, think about these comparisons:

Parts per million:	**Parts per billion:**	**Parts per trillion:**
1 second in 12 days	1 second in 32 years	1 second in 32,000 years
1 inch in 16 miles	1 inch in 16,000 miles	1 inch in 16 million miles
1 drop in 14 gallons	1 drop in 14,000 gallons	10 drops in enough water to fill the Rose Bowl

YOUR WATER MEETS ALL CURRENT FEDERAL AND STATE REQUIREMENTS

San Dimas Water System – Source Water Quality

Primary Standards - Health Based (units)	Primary MCL	PHG (MCLG)	Range of Detection	Average Level	Most Recent Sampling Date	Typical Source of Constituent
Turbidity						
Highest single measurement of the treated surface water (NTU)	TT = 1.0	n/a	n/a	0.08	2016	Soil runoff
Lowest percent of all monthly readings less than 0.3 NTU (%)	TT = 95	n/a	n/a	100%	2016	Soil runoff
Inorganic Constituents						
Aluminum (mg/L)	1	0.6	ND - 0.23	ND	2016	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (µg/L)	10	0.004	ND - 4.2	ND	2016	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Barium (mg/L)	1	2	ND - 0.15	ND	2016	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (mg/L)	2.0	1	ND - 1.0	0.60	2016	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium (µg/L)	10	0.02	ND - 2.3	ND	2016	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Nitrate [as N] (mg/L)	10	10	ND - 8.2	3.4	2016	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radioactive Constituents						
Gross Alpha Activity (pCi/L)	15(a)	(0)	ND - 5.1	ND	2016	Erosion of natural deposits
Gross Beta Activity (pCi/L)	50(b)	(0)	ND - 6.0	ND	2015	Decay of natural and manmade deposits
Uranium (pCi/L)	20	0.43	ND - 5.1	2.9	2016	Erosion of natural deposits
Secondary Standards - Aesthetic (units)	**Secondary MCL**	**PHG (MCLG)**	**Range of Detection**	**Average Level**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Aluminum (µg/L)	200	n/a	ND - 220	ND	2016	Erosion of natural deposits; residue from some surface water treatment processes
Color (units)	15	n/a	ND - 1	ND	2016	Naturally-occurring organic materials
Chloride (mg/L)	500	n/a	24 - 100	54	2016	Runoff/leaching from natural deposits; seawater influence
Iron (µg/L)	300	n/a	ND - 450	ND	2016	Leaching from natural deposits; industrial wastes
Odor---Threshold (units)	3	n/a	ND - 2	ND	2016	Naturally-occurring organic materials
Specific Conductance (uS/cm)	1600	n/a	510 - 1100	740	2016	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	500	n/a	23 - 260	92	2016	Runoff/leaching from natural deposits; industrial wastes
Turbidity (units)	5	n/a	ND - 1.9	0.20	2016	Soil runoff
Total Dissolved Solids (mg/L)	1000	n/a	220 - 660	490	2016	Runoff/leaching from natural deposits
Other Parameters (units)	**Notification Level**	**PHG (MCLG)**	**Range of Detection**	**Average Level**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Alkalinity (mg/L)	n/a	n/a	61 - 300	200	2016	
Calcium (mg/L)	n/a	n/a	26 - 94	69	2016	
Hardness [as CaCO3] (mg/L)	n/a	n/a	120 - 380	280	2016	The sum of polyvalent cations present in the water, generally magnesium and calcium; the cations are usually naturally occurring
Hardness [as CaCO3] (grains/gal)	n/a	n/a	7.0 - 22	16	2016	
Magnesium (mg/L)	n/a	n/a	8.9 - 38	26	2016	
pH (pH units)	n/a	n/a	7.2 - 8.6	7.8	2016	
Potassium (mg/L)	n/a	n/a	2.7 - 5.1	3.8	2016	
Sodium (mg/L)	n/a	n/a	28 - 110	46	2016	Refers to the salt present in the water and is generally naturally occurring
Unregulated Drinking Water Constituents (units)	**Notification Level**	**PHG (MCLG)**	**Range of Detection**	**Average Level**	**Most Recent Sampling Date**	
Chlorodifluoromethane (HCFC-22) (ug/L)	n/a	n/a	ND - 0.43	ND	2015	
Vanadium (µg/L)	50	n/a	ND - 4.8	3.2	2015	
Molybdenum (µg/L)	n/a	n/a	ND - 6.4	4	2015	
Strontium (µg/L)	n/a	n/a	330 - 1200	630	2015	
Chlorate (µg/L)	800	n/a	ND - 250	74	2015	

San Dimas Water System – Distribution Water Quality

Disinfection Byproducts and Disinfectant Residuals (units)	Primary MCL (MRDL)	PHG (MRDLG)	Range of Detection	Average Level	Most Recent Sampling Date	Typical Source of Constituent
Total Chlorine [as Cl2] (mg/L)	(4.0)	(4)	ND - 3.8	1.3	2016	Drinking water disinfectant added for treatment
HAA5 [Total of Five Haloacetic Acids] (µg/L)	60	n/a	1.1 - 20	14	2016	Byproduct of drinking water disinfection
TTHMs [Total of Four Trihalomethanes] (µg/L)	80	n/a	14 - 72	50	2016	Byproduct of drinking water disinfection
Inorganic Constituents (units)	**Action Level**	**PHG (MCLG)**	**Sample Data**	**90th % Level**	**Most Recent Sampling Date**	**Typical Source of Constituent**
Copper (mg/L)	1.3	0.3	None of the 30 samples collected exceeded the action level.	0.42	2014	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

(a) MCL is based on Gross Alpha minus Uranium.

(b) DDW considers 50 pCi/L to be the level of concern for beta particles.

ND = Not Detected CaCO3 = Calcium Carbonate

This table includes data only on constituents that were detected.

Source Water Assessment

GSWC conducted a source water assessment in April and June 2002 for groundwater wells serving the customers of its San Dimas System.

All of the seven groundwater wells are considered most vulnerable to one or more of the following possible contaminating activities. Contaminants associated with these activities have not been detected in the water supply: above ground storage tanks, confirmed leaking underground storage tanks, drinking water treatment plants, dry cleaners, managed forests, and transportation corridors freeways/state highways.

All of the seven groundwater wells are considered most vulnerable to one or more of the following activities, which have been associated with contaminants that have been detected in the water supply: apartments and condominiums, fertilizer, gas stations and repair shops, golf courses, high- and low-density septic systems, high-density housing, historic mining operations, historic waste dumps/landfills, illegal activities/unauthorized dumping, injection wells/dry wells/sumps, known contaminant plumes, monitoring and test holes/water supply wells, non-irrigated crops, office building/complexes, parks, pesticide/herbicide application, and schools.

A copy of the assessment may be viewed at:

DDW Los Angeles District Office
500 N. Central Ave., Suite 500, Glendale, CA 91203

or Golden State Water Company, San Dimas Office
401 S. San Dimas Canyon Rd., San Dimas, CA 91773

You may request a summary of the assessment be sent to you by contacting:

DDW Los Angeles District Office at 1-818-551-2004

For more details, contact Alex Chakmak, Water Quality Engineer, at 1-800-999-4033.

In December 2002, the Metropolitan Water District of Southern California (MWD) completed a source water assessment of its Colorado River and State Water Project supplies.

Colorado River supplies are considered to be most vulnerable to the following: increasing urbanization in the watershed, recreation, urban/stormwater runoff, and wastewater.

State Water Project supplies are considered to be most vulnerable to the following: agriculture, recreation, urban/stormwater runoff, wastewater and wildlife.

A copy of the assessment can be obtained by contacting MWD by phone at 1-213-217-6850, option 3.

Laboratory Analyses

Through the years, we have taken thousands of water samples to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants in your drinking water. The table we provide shows only detected contaminants in the water.

Even though all the substances listed here are under the Maximum Contaminant Level (MCL), we feel it is important that you know exactly what was detected and how much of these substances were present in your water. Compliance (unless otherwise noted) is based on the average level of concentration below the MCL. The state allows us to monitor for some contaminants less than once per year because the concentrations do not change frequently. Some of our data, while representative, is more than a year old.

Lead — 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. Golden State 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 two 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 is available from the Safe Drinking Water Hotline at 1-800-426-4791 or at www.epa.gov/safewater/lead.

Aluminum — The secondary MCL for aluminum is set for aesthetic reasons and there is no health concern associated with the aluminum levels in this water system.

Iron — The secondary MCL for iron is set for aesthetic reasons and there is no health concern associated with the iron levels detected in this water system.

Chloramination — The water purchased by GSWC from Three Valleys Municipal Water District (TVMWD) and Metropolitan Water District of Southern California (MWD) contains chloramine. Chloramine is added to the water for public health protection. Chloraminated water is safe for people and animals to drink, and for all other general uses. Three special user groups, including kidney dialysis patients, aquarium owners, and businesses or industries that use water in their treatment process, must remove chloramine from the water prior to use.

Hospitals or dialysis centers should be aware of chloramine in the water and should install proper chloramine removal equipment, such as dual carbon adsorption units. Aquarium owners can use readily available products to remove or neutralize chloramine. Businesses and industries that use water in any manufacturing process or for food or beverage preparation should contact their water treatment equipment supplier regarding specific equipment needs.

Should you have any questions or concerns regarding chloramine in your water, please contact TVMWD at 1-909-621-5568 or MWD at 1-213-217-6850, option 3.

Fluoridation — Fluoride has been added to the water that GSWC purchases from Metropolitan Water District of Southern California (MWD). Customers should see no difference in the taste, color or odor of their water as a result of fluoridation. Fluoridation does not change the way you normally use water for fish, pets or cooking. Parents and guardians of children who receive fluoride supplements should consult the child's doctor or dentist. For information regarding fluoridation of your water, please contact MWD at 1-213-217-6850, option 2 or visit the Department of Drinking Water's fluoridation website at www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/Fluoridation.shtml.

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 ask for advice from your health care provider.

Turbidity — Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of surface water filtration.

Unregulated Contaminant Monitoring — Monitoring for unregulated contaminants helps the USEPA and the DDW to determine where certain contaminants occur and whether the contaminants need to be regulated.

Risk to Tap and Bottled Water

Drinking water, including bottled water, may reasonably be expected to contain 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 at 1-800-426-4791.

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 layers in the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, which can pick up substances resulting from the presence of animal or human activity.

To be certain that tap water is safe to drink, the USEPA and the DDW prescribe regulations limiting the amount of contaminants in water provided by public water systems. United States Food and Drug Administration (USFDA) and DDW regulations also provide the same public health protection by establishing limits for contaminants in bottled water.

Contaminants in Drinking Water Sources May 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 result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, and 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 byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities