

Southwest Water System

2013

Consumer Confidence Report on Water Quality for 2012



Providing Quality Drinking Water in California Since 1929

Golden State Water Company is pleased to present our Annual Water Quality Report. As your water provider, we are proud to report that your drinking water met all federal and state standards for calendar year 2012.

Bringing you clean drinking water is serious business. We strictly adhere to federal and state drinking water quality guidelines required by the United States Environmental Protection Agency (USEPA), the California Department of Public Health (CDPH) and the California Public Utilities Commission. To ensure the quality of your drinking water, Golden State Water tests for more than 230 regulated and unregulated elements in our water systems. Golden State Water's industry professionals periodically take samples to monitor water quality throughout the distribution system. We spent more than half a million dollars in 2012 on laboratory tests to meet regulatory standards and provide you with high quality drinking water.

If any drinking water standard is ever compromised, Golden State Water is required to take immediate action, notify you quickly and restore normal service.

We pride ourselves on getting the job done right. Over the last 80 years, we've successfully built relationships with the industry's best. Our team of experts is equipped to provide customers with the most efficient and effective service possible. Golden State Water strives to constantly improve our water production and delivery systems, and adequately maintain wells, pumps and pipelines. Our philosophy is to invest in comprehensive preventive maintenance programs so that our water infrastructure reliably provides you with high quality drinking water, 24 hours per day, 7 days per week.

You, our customer, are our number one priority. Our Customer Service Center Representatives are available to answer your water questions and address your concerns day or night, 24 hours a day, 7 days a week. Visit www.gswater.com to learn more about your customer service area, water quality, rebates and water-use efficiency.

As your water provider, we'd like to remind you that efficient water use remains one of the best and least-costly ways to maintain a reliable source of high quality drinking water now and for future generations.

On behalf of the men and women of Golden State Water Company who serve you, thank you for providing us the opportunity to be your water provider. Please call our 24-hour Customer Service Center with any questions or feedback about this report at 1-800-999-4033.

Sincerely,



Robert Sprowls
President and Chief Executive Officer
Golden State Water Company



Frederick J. Adjarian Southwest District Manager Golden State Water Company

About the Company

Golden State Water Company, a subsidiary of American States Water Company (AWR), provides water service to approximately 1 out of every 36 Californians located within 75 communities throughout 10 counties in Northern, Coastal and Southern California (approximately 256,000 customers). The Company also distributes electricity to more than 23,000 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.

Where Does My Water Come From?

Water delivered to customers in the Southwest System is a blend of groundwater pumped from the West and Central Coast Groundwater Basins and imported water from the Colorado River Aqueduct and the State Water Project (imported and distributed by Metropolitan Water District of Southern California). The West Coast Groundwater Basin stretches southwesterly from the Newport-Inglewood Fault Zone. The Central Coast Groundwater Basin is bounded on the north by the La Brea Uplift; on the east by the Elysian, Repetto, Merced and Puente hills; on the southeast by the Orange County Groundwater Basin; and on the west by the Newport-Inglewood Fault Zone.

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 California Department of Public Health (CDPH) 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.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Cross Connection Control Program

Golden State Water Company'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

www.gswater.com/protecting-our-drinking-water.

Connect with us to learn more!

Visit www.gswater.com to learn how to:

- Become a water conservation expert
- Learn more about available conservation rebates and programs
- Get the latest Water Quality Report for your area
- Understand your water bill and learn about payment options.

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

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.

이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시요.

この情報は重要です。 翻訳を依頼してください。

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito. Chi tiết này thật quan trọng. Xin nhờ người dịch cho quý vị.

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.

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:

1 second in 12 days 1 inch in 16 miles 1 drop in 14 gallons



Parts per billion:

1 second in 32 years 1 inch in 16,000 miles 1 drop in 14,000 gallons



Parts per trillion:

1 second in 32,000 years 1 inch in 16 million miles

10 drops in enough water to fill the Rose Bowl

YOUR WATER MEETS ALL CURRENT FEDERAL AND STATE REQUIREMENTS										
Southwest 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	0.06	2012	Soil runoff				
Lowest percent of all monthly readings less than 0.3 NTU (%)	TT = 95	n/a	n/a	100%	2012	Soil runoff				
Inorganic Constituents										
Aluminum (mg/L)	1	0.6	ND - 0.34	ND	2012	Erosion of natural deposits; residue from some surface water treatment processes				
Arsenic (µg/L)	10	0.004	ND - 2.2	ND	2012	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes				
Barium (mg/L)	1	2	ND - 0.12	ND	2012	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits				
Fluoride (mg/L)	2.0	1	0.26 - 1.10	0.43	2012	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories				
Radioactive Constituents										
Gross Alpha Activity (pCi/L)	15	(0)	ND - 9.0	ND	2012	Erosion of natural deposits				
Gross Beta Activity (pCi/L)	50(a)	(0)	ND - 6.0	ND	2012	Decay of natural and manmade deposits				
Combined Radium (pCi/L)	5(b)	(0)	ND - 1.2	ND	2012	Erosion of natural deposits				
Uranium (pCi/L)	20	0.43	ND - 2.0	ND	2012	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 - 340	ND	2012	Erosion of natural deposits; residue from some surface water treatment processes				
Color (units)	15	n/a	ND - 15	3	2012	Naturally-occurring organic materials				
Chloride (mg/L)	500	n/a	21 - 100	56	2012	Runoff/leaching from natural deposits; seawater influence				
Iron (µg/L)	300	n/a	ND - 120	ND	2012	Leaching from natural deposits; industrial wastes				
Manganese (μg/L)	50	n/a	ND - 46	ND	2012	Leaching from natural deposits				
OdorThreshold (units)	3	n/a	ND - 3	ND	2012	Naturally-occurring organic materials				
Specific Conductance (uS/cm)	1600	n/a	340 - 1000	630	2012	Substances that form ions when in water; seawater influence				
Sulfate (mg/L)	500	n/a	1 - 60	51	2012	Runoff/leaching from natural deposits; industrial wastes				
Turbidity (NTU)	5	n/a	ND - 0.3	0.1	2012	Soil runoff				
Total Dissolved Solids (mg/L)	1000	n/a	240 - 500	367	2012	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	53 - 270	183	2012					
Calcium (mg/L)	n/a	n/a	27 - 66	49	2012					
Hardness [as CaCO3] (mg/L)	n/a	n/a	80 - 270	181	2012	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	4.7 - 15.8	10.6	2012					
Magnesium (mg/L)	n/a	n/a	9.2 - 21	14	2012					
pH (pH units)	n/a	n/a	7.1 - 8.7	8.1	2012					
Potassium (mg/L)	n/a	n/a	2.3 - 5.9	4.1	2012					
Sodium (mg/L)	n/a	n/a	37 - 82	51	2012	Refers to the salt present in the water and is generally naturally occurring				

Southwest Water System — Distribution Water Quality										
Microbiological Constituents (units)	Primary MCL	PHG (MCLG)	Value		Most Recent Sampling Date	Typical Source of Constituent				
Total Coliform Bacteria >40 Samples/Month (Present / Absent)	More than 5% of monthly samples are positive	(0)	Highest percent of monthly samples positive was 0.57 %		2012	Naturally present in the environment				
Disinfection Byproducts and Disinfectant Residuals (units)	Primary MCL (MRDL)	PHG (MRDLG)	Range of Detection	Average Level	Most Recent Sampling Date	Typical Source of Constituent				
Bromate (µg/L)	10	0.1	3.7 - 6.9	5.2	2012	Byproduct of drinking water disinfection				
Chloramines [as Cl2] (mg/L)	(4.0)	(4)	ND - 4.4	2.2	2012	Drinking water disinfectant added for treatment				
HAA5 [Total of Five Haloacetic Acids] (µg/L)	60	n/a	ND - 32	13	2012	Byproduct of drinking water disinfection				
TTHMs [Total of Four Trihalomethanes] (µg/L)	80	n/a	ND - 75	29	2012	Byproduct of drinking water disinfection				
Unregulated Drinking Water Contaminants (units)	Notification Level	PHG (MCLG)	Range of Detection	Average Level	Most Recent Sampling Date					
N-nitrosodiethylamine [NDEA] (ng/L)	10	n/a	ND - 34(c)	ND	2009					
N-Nitrosodimethylamine [NDMA] (ng/L)	10	3	ND - 7.4(c)	ND	2009					
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 53 samples collected exceeded the action level.	0.3	2010	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				

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

⁽b) MCL is based on combined Radium-226 + Radium-228.

⁽c) NDMA and NDEA were detected in the treated sources of MWD and Golden State Water Company's Southwest System distribution system.

ND = Not Detected CaCO3 = Calcium Carbonate

Source Water Assessment

Golden State Water Company conducted a source water assessment from 2002 through 2003 for each groundwater well serving the customers of its Southwest System.

The groundwater sources are considered most vulnerable to the following activities not associated with detected contaminants:

- Active and historic gas stations
- Automobile body shops
- Chemical/petroleum processing/ ▶ Machine shops storage
- Confirmed leaking underground storage tanks
- Dry cleaners
- ▶ Electric/electronic manufacturing
- Furniture repair/manufacturing

- ▶ High density septic systems
- Landfills/dumps
- Metal plating/finishing/ fabrication
- Other animal operations
- Photo processing/printing
- Plastics/synthetics producers
- Sewer collection systems

A copy of the assessment may be viewed at:

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

GSWC Southwest Office

1600 West Redondo Beach Blvd., Suite 101, Gardena, CA 90247

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

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

For more details, contact Katherine Nutting at 1-800-999-4033

In December 2002, 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
- Urban/storm water runoff
- Wastewater

Recreation

State Water Project supplies are considered to be most vulnerable to the following:

Agriculture Recreation

- Wastewater
- Wildlife
- Urban/storm water runoff

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.

Chloramination — 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.

Some people who use water containing chloramines well in excess of

the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.

Fluoridation — Fluoride has been added to the water that Golden State Water receives from Metropolitan Water District of Southern California (MWD) since 2007. In 2013, Golden State Water began adding fluoride to our groundwater sources so that the entire system would be optimally fluoridated. 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 quardians of children who receive fluoride supplements should consult the child's doctor or dentist. For information regarding fluoridation of your water, please contact us at 800-999-4033 or visit the California Department of Public Health's fluoridation website at www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx.

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

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.

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 CDPH 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 CDPH prescribe regulations limiting the amount of contaminants in water provided by public water systems. United States Food and Drug Administration (USFDA) and CDPH 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 storm water 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 storm water 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 storm water runoff and septic systems
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities