

## 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](http://www.gswater.com) or email us at [customerservice@gswater.com](mailto:customerservice@gswater.com).

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

Ce rapport contient des informations importantes concernant votre eau potable. Veuillez le traduire ou parler avec quelqu'un qui peut le comprendre.

Questo rapporto contiene informazioni importanti che riguardano la vostra acqua potabile. Traducetelo o parlate con una persona qualificata in grado di spiegarvelo.

Dieser Bericht enthält wichtige Informationen über Ihr Trinkwasser. Übersetzen Sie ihn oder sprechen Sie mit jemandem, der ihn versteht.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

Chi tiết này thật quan trọng. Xin nhờ người dịch cho quý vị.

이 안내는 매우 중요합니다.  
본인을 위해 번역인을 사용하십시오.

この情報は重要です。  
翻訳を依頼してください。



**Golden State**  
Water Company  
A Subsidiary of American States Water Company

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



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# Providing Quality Drinking Water in California Since 1929

Golden State Water Company (GSWC) is pleased to present this Annual Water Quality Report, which contains important information about the quality of your drinking water for calendar year 2011.

Bringing you clean drinking water is serious business. We strictly follow the guidelines of the U.S. Environmental Protection Agency, the California Department of Public Health, and the California Public Utilities Commission, sampling more than 230 regulated and unregulated elements in our water systems. GSWC's industry professionals regularly take samples to monitor quality at the water source and throughout the distribution system. We spent more than \$550,000 companywide last year on laboratory tests to ensure that we are meeting regulatory standards and providing high-quality water. If any drinking water standard is compromised, we are required to take immediate action, notify you quickly, and restore normal service.

We pride ourselves on getting the job done right. For more than 80 years, we have successfully built relationships with the industry's best and our team of experts is equipped to provide customers with the most efficient and effective service possible. We are constantly improving our water production and delivery systems, and maintaining wells, pumps and pipelines. Our philosophy is to invest in robust preventive maintenance programs so that our water infrastructure can provide you with high-quality water, 24 hours per day, 7 days per week.

You, our customer, are our number one priority. Our around-the-clock Customer Service Center has representatives to answer your water questions and to address your concerns day or night. Our website, [www.gswater.com](http://www.gswater.com), contains a wide range of topics that include water quality, conservation rebates and information about your local customer service area, and water-use efficiency.

With regard to water-use efficiency, conservation remains one of the best and least-cost ways to maintain a reliable source of high quality water now and for future generations.

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

Sincerely,



Robert Sprows  
President and Chief Executive Officer  
Golden State Water Company



Frederick J. Adjarian  
Southwest District Manager  
Golden State Water Company



# 2012

## Water Quality Report for year 2011



## Southwest Water System



### Source Water Assessment

GSWC 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/storage, confirmed leaking underground storage tanks, dry cleaners, electric/electronic manufacturing, furniture repair/manufacturing, high-density septic systems, landfills/dumps, machine shops, metal plating/finishing/fabrication, other animal operations, photo processing/printing, plastics/synthetics producers, and 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:

Sabine Arweiler 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
- Recreation
- Urban/stormwater runoff
- Wastewater

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

- Agriculture
- Recreation
- Urban/stormwater runoff
- Wastewater
- Wildlife

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

### Cross Connection Control Program

GSWC'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/water\\_quality.html](http://www.gswater.com/water_quality.html).

### 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.

### 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, and 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 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

### 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 U.S. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

### 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.



## Laboratory Analyses

Over 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 enclosed table shows only those contaminants that were detected in the water. Although all but **ONE** substance 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 the substance is present. This report serves as a reminder that our water temporarily exceeded drinking water standards. For more information, see the section marked **MCL Violation** later in this report. Compliance (unless otherwise noted) is based on the average level of concentration being 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, though representative, is more than a year old.

**Chloramination** — The water purchased by GSWC from 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 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 3 or visit the California Department of Public Health's fluoridation website at [www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx](http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx).

**MCL Violation** — Total coliform bacteria are generally not harmful themselves. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems. GSWC routinely monitors drinking water to ensure its quality. We took 251 samples to test for the presence of coliform bacteria during November 2011. The standard set by the California Department of Public Health states that no more than 5.0 percent of samples may show the presence of coliform bacteria. Our samples tested at slightly above that level — 6.8 percent.

During 2011, GSWC initiated a water distribution maintenance activity called unidirectional flushing. This is a flushing technique that scours or thoroughly cleans the distribution pipes by controlling the direction of flow and velocity within the pipeline being flushed. This flushing technique helps to main-

tain good water quality and control distribution maintenance costs. As we conduct this type of flushing, it is normal to have temporary changes in water quality.

The results of our routine monitoring in November 2011 did not indicate a public health threat. The presence of coliforms was not the result of a contamination event but rather due to the unidirectional flushing activities. If this had been a public health concern, you would have been notified immediately.

**Aluminum, Manganese** — 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. GSWC 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 <http://www.epa.gov/safewater/lead>.

**Total Trihalomethanes (TTHMs)** — Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.

**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.

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



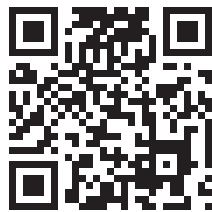
Parts per billion:  
1 drop in 14,000 gallons  
1 second in 32 years  
1 inch in 16,000 miles



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



## Point...Click...Conserve!



Visit [www.gswater.com](http://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 get 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](mailto:customerservice@gswater.com)

## 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 U.S. 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.

## Southwest Water System – Source Water Quality

Primary Standards - Health Based (units)	Primary MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	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	0.07	No	2011	Soil runoff
Lowest percent of all monthly readings less than 0.3 NTU (%)	TT = 95	n/a	n/a	100	No	2011	Soil runoff
Inorganic Constituents							
Aluminum (mg/L)	1	0.6	ND - 0.24	ND	No	2011	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ug/L)	10	0.004	ND - 2.3	ND	No	2011	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Barium (mg/L)	1	2	ND - 0.12	ND	No	2011	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (mg/L)	2.0	1	0.26 - 1.00	0.43	No	2011	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate [as NO3] (mg/L)	45	45	ND - 2.2	ND	No	2011	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radioactive Constituents							
Gross Alpha Activity (pCi/L)	15	(0)	ND - 9.0	ND	No	2011	Erosion of natural deposits
Gross Beta Activity (pCi/L)	50(a)	(0)	ND - 6.0	ND	No	2011	Decay of natural and manmade deposits
Radium-228 (pCi/L)	n/a	0.019	ND - 1.2	ND	No	2011	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	ND - 2.0	ND	No	2011	Erosion of natural deposits
Secondary Standards - Aesthetic (units)	Secondary MCL	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Aluminum (ug/L)	200	n/a	ND - 240	ND	No	2011	Erosion of natural deposits; residue from some surface water treatment processes
Color (units)	15	n/a	ND - 10	3	No	2011	Naturally occurring organic materials
Chloride (mg/L)	500	n/a	21 - 100	54	No	2011	Runoff/leaching from natural deposits; seawater influence
Iron (ug/L)	300	n/a	ND - 220	ND	No	2011	Leaching from natural deposits; industrial wastes
Manganese (ug/L)	50	n/a	ND - 72	ND	No	2011	Leaching from natural deposits
Odor—Threshold (units)	3	n/a	ND - 3	1	No	2011	Naturally occurring organic materials
Specific Conductance (uS/cm)	1600	n/a	320 - 960	600	No	2011	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	500	n/a	1 - 170	50	No	2011	Runoff/leaching from natural deposits; industrial wastes
Turbidity (units)	5	n/a	ND - 0.33	0.12	No	2011	Soil runoff
Total Dissolved Solids (mg/L)	1000	n/a	270 - 490	360	No	2011	Runoff/leaching from natural deposits
Other Parameters (units)	Notification Level	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Alkalinity (mg/L)	n/a	n/a	43 - 270	180	n/a	2011	
Calcium (mg/L)	n/a	n/a	26 - 66	50	n/a	2011	
Hardness [as CaCO3] (mg/L)	n/a	n/a	57 - 270	180	n/a	2011	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	3.3 - 15.8	10.5	n/a	2011	
Magnesium (mg/L)	n/a	n/a	9 - 21	14	n/a	2011	
pH (pH units)	n/a	n/a	7.0 - 8.8	8.1	n/a	2011	
Potassium (mg/L)	n/a	n/a	2.7 - 5.9	4.1	n/a	2011	
Sodium (mg/L)	n/a	n/a	37 - 77	51	n/a	2011	Refers to the salt present in the water and is generally naturally occurring
Unregulated Constituents Requiring Monitoring (units)	Notification Level	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
N-nitrosodiethylamine [NDEA] (ng/L) (b)	10	n/a	ND - 34	ND	n/a	2009	
N-nitrosodimethylamine [NDMA] (ng/L) (b)	10	n/a	ND - 7.4	1.4	n/a	2009	

## Southwest Water System – Distribution Water Quality

Microbiological Constituents (units)	Primary MCL	PHG (MCLG)	Value	MCL Violation?	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 6.8 %	Yes	2011	Naturally present in the environment	
Disinfection Byproducts and Disinfectant Residuals (units)	Primary MCL (MRDL)	PHG (MRDLG)	Range of Detection	Highest 4-Quarterly Average	MCL Violation?	Most Recent Sampling Date	Typical Source of Constituent
Bromate (ug/L)	10	0.1	ND - 8.8	5.9	No	2011	Byproduct of drinking water disinfection
Chloramines [as Cl2] (mg/L)	(4.0)	(4)	ND - 4.4	2.2	No	2011	Drinking water disinfectant added for treatment
HAA5 [Total of Five Haloacetic Acids] (ug/L)	60	n/a	ND - 56	13	No	2011	Byproduct of drinking water disinfection
TTHMs [Total of Four Trihalomethanes] (ug/L)	80	n/a	ND - 140	32	No	2011	Byproduct of drinking water disinfection
Inorganic Constituents (units)	Action Level	PHG (MCLG)	Sample Data	90th % Level	Exceedance?	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	No	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) NDMA and NDEA were detected in the imported sources of Metropolitan Water District of Southern California and GSWC's Southwest Distribution System.

ND = Not Detected

CaCO3 = Calcium Carbonate