

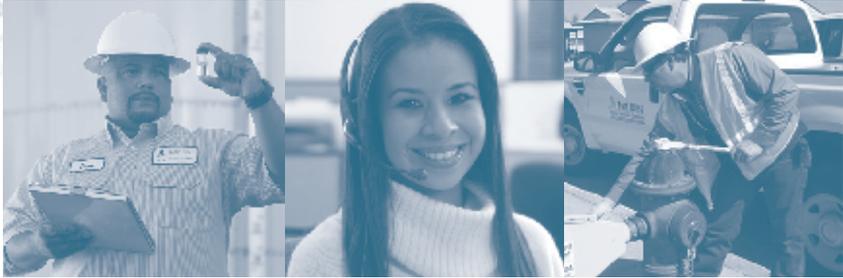
# 2009 Water Quality Report



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



***For You, Only Our Best Will Do!***



***An Ongoing Commitment to the Communities We Serve.***

**Point...Click...Conserve**  
**[www.gswater.com](http://www.gswater.com)**

**Norwalk Water System**



## Golden State

Water Company

A Subsidiary of American States Water Company

## Superior Water Quality and Best in Class Customer Service

We are pleased to present the following 2009 Water Quality Report for your service area. This report is an important measure of how well we meet water quality standards and our goal to provide “best in class” customer service. It is our job to test for more than 100 different constituents in the water to meet all regulations and provide you the highest quality water possible.

Balancing high water quality and customer service is second nature to us. We also put a tremendous amount of focus and energy into educating customers about water conservation, especially in drought-prone areas. We are committed to fostering ongoing communication with our customers so we can be partners in an effort to use water more efficiently. Preserving water resources for the future is everyone’s responsibility, requiring effort from water providers, local and state governments, and customers.

Equally important, we are constantly improving our water infrastructure to ensure our water supply and delivery systems are sufficient and reliable. We routinely perform maintenance so that our storage and treatment facilities, pipelines, wells, and other equipment are kept in the best possible condition. By addressing prudent infrastructure needs sooner, rather than later, we maintain the quality of our water and minimize the impact of future rate increases.

On behalf of all employees, I thank you for providing us the opportunity to serve you. We will continue to work hard for you, striving for excellence in all that we do. Please do not hesitate to contact us if you have any questions or feedback. Customer service representatives are available 24 hours a day, every day, 365 days a year, at 1-800-999-4033.



Sincerely,

Robert Sprowls  
President and  
Chief Executive Officer  
Golden State Water Company



Paul Rowley  
Central  
District Manager

## About the Company

American States Water Company is an investor-owned, utility holding company traded on the New York Stock Exchange under the trading symbol AWR.

American States Water Company (AWR) is the parent company of Golden State Water Company (GSWC), American States Utility Services, Inc. and Chaparral City Water Company. Through its subsidiaries, AWR provides water service to 1 out of 37 Californians located within 75 communities throughout 10 counties in Northern, Coastal and Southern California (approximately 254,000 customers) and to over 13,000 customers in the city of Fountain Hills, Arizona and a small portion of Scottsdale, Arizona. The Company also distributes electricity to over 23,000 customers in the Big Bear recreational area of California. Through its contracted services subsidiary, American States Utility Services, Inc., the Company contracts with the U.S. government and private entities to provide various services, including water marketing and operation and maintenance of water and wastewater systems. Golden State Water Company is an active contributor to the Water Research Foundation.

## Delivering Excellence, One Drop at a Time – GSWC's Water Philosophy

### 1 Protect

Golden State Water Company (GSWC) understands that protecting your water supply is of the utmost importance. The source of your water supply is monitored on a schedule approved by the California Department of Public Health (CDPH), and any activity which may affect this supply is closely analyzed. Should action become necessary, GSWC will use the best available technology to protect your water supply. GSWC welcomes and encourages consumers to share in our vigilance. If you observe any activities that could possibly endanger the water supply, contact us immediately by calling our 24-hour customer service center at 1-800-999-4033.

### 2 Monitor

To maintain the safety and integrity of your water supply, GSWC constantly monitors its water sources, treatment processes and distribution system for all constituents mandated by the United States Environmental Protection Agency (USEPA) and the CDPH. In 2008, GSWC's independent laboratories conducted approximately 90,000 analyses on over 21,000 samples company-wide to provide the highest quality of water delivered to your tap.



### 3 Invest

GSWC's state certified water treatment and distribution operators work diligently to ensure water treatment processes are maintained to the highest standards. Whenever necessary, new technologies are adopted to benefit our customers. Water is delivered via a complex distribution system made up of multiple sources of supply, storage facilities, pumps, pipes, valves, meters, and countless other components to provide safe water to your tap. GSWC carefully monitors the system and invests annually to ensure it is kept in top condition, minimizing the risk of major problems which are costly to repair.

### 4 Serve

The quality of GSWC's customer service is just as important as the water itself. We pride ourselves on providing "best in class" service and personal assistance 24 hours a day, seven days a week, 365 days a year. We are able to accomplish this by hiring the best and brightest men and women and by providing ongoing support and training to all employees. All GSWC employees share a commitment to provide the best possible service.

## Where Does My Water Come From?

Water delivered to customers in the Norwalk system is a blend of groundwater pumped from the Central Groundwater Basin and imported water from the Colorado River Aqueduct and the State Water Project (imported and distributed by the Metropolitan Water District of Southern California). The Central 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.

## For People with Sensitive Immune Systems . . .

Some people may be more vulnerable to contaminants in the water than the

general population. Immuno-compromised 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 persons and infants can be particularly at risk of infections. These people should seek advice from their healthcare provider about their drinking water.

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.



## Risk to Tap and Bottled Water

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 mean water may be 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.

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.

In order to be certain that tap water is safe to drink, the USEPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

## 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 by-products 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.

## Norwalk 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
<b>Turbidity</b>							
Highest single measurement of the Treated Surface Water (NTU)	TT = 1.0	n/a	n/a	0.05	No	2008	Soil runoff
Lowest Percent of all Monthly Readings less than 0.3 NTU (%)	TT = 95	n/a	n/a	100%	No	2008	Soil runoff
<b>Inorganic Constituents</b>							
Aluminum (mg/L)	1	0.6	ND - 0.28	0.10	No	2008	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ug/L)	10	0.004	ND - 2.9	ND	No	2008	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Barium (mg/L)	1	2	ND - 0.13	ND	No	2008	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (mg/L)	2.0	1	0.19 - 1.0	0.64	No	2008	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury (mg/L)	2	1.2	ND - 1.5	ND	No	2008	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nitrate [as NO3] (mg/L)	45	45	ND - 31	7.1	No	2008	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ug/L)	50	(50)	ND - 6.5	ND	No	2008	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)

## Norwalk 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
<b>Volatile Organic Constituents</b>							
1,1-Dichloroethane (ug/L)	5	3	ND - 1.0	ND	No	2008	Extraction and degreasing solvent; used in manufacture of pharmaceuticals, stone, clay and glass products; fumigant
1,1-Dichloroethylene (ug/L)	6	10	ND - 1.0	ND	No	2008	Discharge from industrial chemical factories
cis-1,2-Dichloroethylene (ug/L)	6	100	ND - 2.2	ND	No	2008	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination
Trichloroethylene [TCE] (ug/L)	5	0.8	ND - 3.5	ND	No	2008	Discharge from metal degreasing sites and other factories
<b>Radioactive Constituents</b>							
Gross Alpha Activity (pCi/L)	15	(0)	ND - 9.7	4.8	No	2008	Erosion of natural deposits
Gross Beta Activity (pCi/L)	50 <sup>(a)</sup>	(0)	ND - 9.7	ND	No	2008	Decay of natural and manmade deposits
Combined Radium (pCi/L)	5 <sup>(b)</sup>	(0)	ND - 1.4	ND	No	2008	Erosion of natural deposits
Uranium (pCi/L)	20	0.43	1.6 - 10	3.6	No	2008	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 - 280	100	No	2008	Erosion of natural deposits; residue from some surface water treatment processes
Colors (units)	15	n/a	ND - 3.0	1.5	No	2008	Naturally-occurring organic Materials
Chloride (mg/l)	500	n/a	30 - 170	90	No	2008	Runoff/leaching from natural deposits; seawater influence
Odor—Threshold (units)	3	n/a	ND - 3	2	No	2008	Naturally occurring organic materials
Specific Conductance (uS/cm)	1600	n/a	520 - 1800	910	No	2008	Substance that form ions when in water; seawater influence
Sulfate (mg/L)	500	n/a	47 - 620	160	No	2008	Runoff/leaching from natural deposits; industrial waste
Turbidity (units)	5	n/a	ND - 0.12	0.04	No	2008	Soil runoff
Total Dissolved Solids (mg/L)	1000	n/a	280-680	560	No	2008	Runoff/leaching from natural deposits
Zinc (mg/L)	5	n/a	ND - 0.14	ND	No	2008	Runoff/leaching from natural deposits; industrial wastes

(a) Effective 6/11/06, the gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used a screening level.

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

## Norwalk Water System - Source Water Quality

Unregulated Constituents Requiring Monitoring (units)	Notification Level	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	
Boron (ug/L)	1000	n/a	130 - 200	160	n/a	2008	
Vanadium (ug/L)	50	n/a	ND - 5.1	3.1	n/a	2008	
Other Parameters (units)	Notification Level	PHG (MCLG)	Range of Detection	Average Level	MCL Violation?	Most Recent Sampling Date	
Alkalinity (mg/L)	n/a	n/a	81 - 370	140	n/a	2008	
Calcium (mg/L)	n/a	n/a	23 - 180	68	n/a	2008	
Hardness [as CaCO <sub>3</sub> ] (mg/l)	n/a	n/a	110 - 630	290	n/a	2008	The Sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally-occurring
Hardness [as CaCO <sub>3</sub> ] (grains/gal)	n/a	n/a	6.3 - 1.8	12	n/a	2008	
Magnesium (mg/L)	n/a	n/a	8.8 - 43	22	n/a	2008	
N-Nitrosodimethylamine [NDMA] (ng/L)	10	n/a	ND - 7.4	2.1	n/a	2008	By product of drinking water chlorination; industrial processes.
pH (pH units)	n/a	n/a	7.2 - 8.4	8.0	n/a	2008	
Potassium (mg/L)	n/a	n/a	2.6 - 5.9	4.1	n/a	2008	
Sodium (mg/L)	n/a	n/a	450 - 120	82	n/a	2008	Refers to the salt present in the water and is generally naturally occurring.

## Norwalk System - Distribution Water Quality

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)	ND - 10	7.8	No	2008	Drinking water disinfectant added for treatment
Chlorine [as Cl <sub>2</sub> ] (mg/L)	(4.0)	(4)	ND - 3.2	1.8	No	2008	Drinking water disinfectant added for treatment
HAA5 [Total of Five Haloacetic Acids] (ug/L)	60	n/a	2.6 - 27	12	No	2008	Byproduct of drinking water disinfection
TTHMs [Total of Four Trihalomethanes] (ug/L)	80	n/a	1.3 - 73	28	No	2008	Byproduct of drinking water chlorination
Inorganic Constituents (units)	Action Level	PHG (MCLG)	Sample Data	90th % Level	MCL Violation?	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.	0.56	No	2007	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ug/L)	15	2	1 of the 30 samples collected exceeded the action level.	1.8	No	2007	Internal corrosion of household plumbing systems; discharges from industrial manufactures; erosion of natural deposits

## Laboratory Analyses

Over the years we have taken thousands of water samples in order 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 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 the water. 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 imported from Metropolitan Water District of Southern California (MWDSC) 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 need to be aware of a change in water disinfectant from chlorine to chloramine. Chloramination may require companies to adjust or upgrade their current treatment system. Businesses should contact their water treatment equipment supplier to determine if chloramine could impact their system.

Should you have any questions or concerns regarding chloramine in your water, please contact MWDSC at (213) 217-6000.

## Fluoridation

Customers receiving water from MWDSC will see no difference in the taste, color or odor of their water as a result of fluoridation. Fluoridation will not change the way you normally use water for fish, pets, or cooking. Children who receive fluoride supplements should consult their doctor or dentist. For information regarding fluoridation of your water, please contact MWDSC at (213) 217-6850, option 2.

## Nitrate

Nitrate in drinking water at levels above 45 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 45 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 advice from your health care provider.

## Specific Conductance

The secondary MCL for specific conductance is set for aesthetic reasons and there is no health concern associated with the specific conductance levels detected in the Norwalk System.

## Sulfate

The secondary MCL for sulfate is set for aesthetic reasons and there is no health concern associated with the sulfate levels detected in the Norwalk System.

## Total Dissolved Solids

The secondary MCL for total dissolved solids is set for aesthetic reasons and there is no health concern associated with the total dissolved solids levels detected in the Norwalk System.

## 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

*To ensure the best possible quality, water is sampled and tested consistently throughout the year.*

### Contaminants are measured in:

- parts per million (ppm) or milligrams per liter (mg/L),
- parts per billion (ppb) or micrograms per liter ( $\mu\text{g/L}$ ),
- 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 ( $\mu\text{S/cm}$ ) – 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



42 gallons  
(large bathtub)

#### Parts per billion:

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



14,000 gallons  
(average swimming pool)

#### 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



14,000,000 gallons  
(average lake)

## 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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

### **Maximum Residual Disinfectant Level Goal (MRDLG)**

The level of a disinfectant added for water treatment below which there is no known or expected health risk. MRDLGs are set by the USEPA.

### **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)**

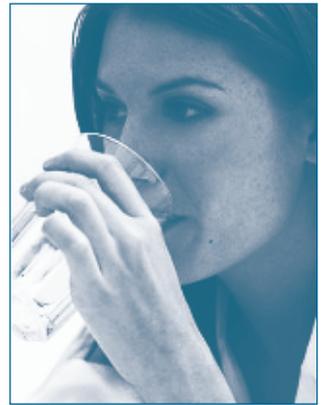
A required process intended to reduce the level of a contaminant in drinking water.

## Source Water Assessment

A source water assessment was conducted for each of the groundwater wells serving the customers of GSWC – Norwalk System in 2002, finalized in 2003.

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

- Automobile car washes, gas stations, parking lots/malls, and transportation corridors.



*A copy of the assessment may be viewed at:*

CDPH Los Angeles Region Office  
1449 West Temple Street, Room 202  
Los Angeles, CA 90026

or

GSWC- Central District Office  
12035 Burke Street, Ste #1  
Santa Fe Springs, CA 90670

You may request a summary of the assessment be sent to you by contacting:  
CDPH Los Angeles District Office At (213) 580-5723

For more details or information contact: Dawn Lei at 1-800-999-4033

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In December 2002, MWDSC completed a source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting MWDSC by phone at (213) 217-6000.

## 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 the water quality page at [www.gswater.com](http://www.gswater.com).

## Hydrant Flushing

Hydrant flushing, also known as flushing, is a process by which water is moved through pipes at a high speed so that a scouring action is created. Flushing aids in maintaining and improving water quality while restoring flow and pressure in the water system.

The following are common customer questions about flushing:

### **Q: Why are you flushing during a drought?**

*A: Maintaining high quality water is our number one priority. We must continue flushing activities during a drought to sustain our high water quality. GSWC will continue to balance the need for safe drinking water with the need for conservation.*

### **Q: Will my water service be interrupted?**

*A: No. You will continue to receive water service during flushing. You may, however, experience lower pressure and possible discoloration for a short period of time if you live near the flushing activity.*

For answers to additional questions about our flushing activities, please call our customer service center at 1-800-999-4033.

## 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 call center at 1-800-999-4033. Visit us online at [www.gswater.com](http://www.gswater.com) or e-mail 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.



# Golden State

## Water Company

A Subsidiary of American States Water Company

12035 Burke St., Suite 1

Santa Fe Springs, CA 90670

## Water Use Efficiency Tips

**Approximately 50 to 70% of residential water is used outdoors for watering lawns and gardens. Never water during the hottest times of the day or when it's windy.**

- Water your yard only before 8 a.m. to reduce evaporation and interference from the wind. This will save you 25 gallons per day.
  - Hosing down your driveway for 5 minutes wastes 25 gallons of water. Clean it with a broom or blower instead. Wash only full loads of laundry and save 15 to 50 gallons of water per load.
  - Fix faucet leaks. A steady leak wastes 15 to 20 gallons per day.
  - If your showerhead can fill a one-gallon bucket in less than 20 seconds, replace it with a high-efficiency showerhead.
- For more information, please log onto [www.gswater.com](http://www.gswater.com)

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