

2018

Orcutt Water System

Consumer Confidence Report on Water Quality for 2017









Providing Quality Drinking Water in California Since 1929

www.gswater.com/OrcuttCCR

Golden State Water Company (Golden State Water) is pleased to present our Annual Water Quality Report (Consumer Confidence Report) for 2017.

Delivering drinking water is serious business, and our team of scientists, engineers and water experts share the focus of protecting our water systems and delivering reliable, quality water to customers whenever they need it.

We know that water is part of your every day, and want you to rest assured knowing that the water delivered to your tap meets all federal and state quality standards established by the United States Environmental Protection Agency (USEPA), State Water Resources Control Board's Division of Drinking Water (DDW) and California Public Utilities Commission (CPUC).

Our team of water quality professionals aggressively monitors and tests our water supply for hundreds of contaminants. In 2017 alone, we invested nearly half a million dollars on laboratory testing to meet regulatory standards. Additional information about water quality, including sampling results, is available at www.gswater.com.

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

Last year, Golden State Water proactively initiated the School Lead Testing program to collaborate with schools in our service areas to test the water in their facilities for compliance with lead standards. Ensuring that any school we serve water to is also providing only the purest water to their students is a high priority to Golden State Water. We look forward to continuing the program in 2018, following the signing of new legislation (AB 746) that makes lead testing mandatory for all California public K-12 schools constructed before Jan. 1, 2010.

Our customers have always been our top priority, and we make it a point to ensure that we always have personnel available to assist our customers with their inquiries or other service related needs. Golden State Water is constantly working toward 100 percent customer satisfaction and encourages all customers to visit www.gswater.com and follow us on Twitter and on Facebook at @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 everyone at Golden State Water, thank you for being a valued customer.

Sincerely



Robert Sprowls President and Chief Executive Officer Golden State Water Company



Mark Zimmer General Manager, Coastal 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.

Conserving for California

Golden State Water thanks customers for their impressive conservation efforts, and encourages the entire community to continue using water wisely to keep the state on the path to full drought recovery. Following unusually dry winter months, it is critical that all customers continue to use water wisely and make conservation a California Way of Life.

On May 9, 2016 Governor Jerry Brown issued an Executive Order that permanently prohibits practices that waste potable water. These practices include prohibiting hosing off sidewalks, driveways and other hardscapes, washing a motor vehicle without a hose that is fitted with a shut-off nozzle, operating a fountain or decorative water feature unless the water is part of a recirculation system, watering outdoor landscapes in a manner that causes excess runoff, or within 48 hours following measurable precipitation and irrigating ornamental turf in public street medians with potable water.

Golden State Water thanks customers for their continued conservation efforts. To learn more about the drought and water waste restrictions in your area, please visit http://www.gswater.com/drought/ or call 1.800.999.4033.

Where Does My Water Come From?

Water delivered to customers in the Orcutt System is groundwater pumped from the Santa Maria Groundwater Basin through wells owned and operated by Golden State Water Company. The groundwater basin is recharged from a collection of local drainage basins, streams and creeks, as well as natural percolation from rain, agriculture and domestic use. The water system also augments supplies with water purchased from the Central Coast Water Authority.

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.



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.

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.qswater.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: 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 gallor

Parts per trillion: 1 second in 32,000 years 1 inch in 16 million miles

1 inch in 16,000 miles
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 Orcutt Water System - Source Water Quality Primary Standards -Health Based (units) PHG (MCLG) Most Recent Sampling Date Primary MCL Range of Detection Average Level **Typical Source of Constituent** Turbidity Highest single measurement of the treated TT = 1.0ND 2017 Soil runoff n/a n/a surface water (NTU) Lowest percent of all monthly readings less 95% TT = 95n/a n/a 2017 Soil runoff than 0.3 NTU (%) **Inorganic Constituents** Aluminum (mq/L) 0.6 ND - 0.11 0.06 2017 Erosion of natural deposits: residue from some surface water treatment processes 1 Erosion of natural deposits; water additive that promotes strong teeth; discharge Fluoride (mg/L) 2.0 1 ND - 0.3 0.2 2017 from fertilizer and aluminum factories Discharge from electroplating factories, leather tanneries, wood preservation, Hexavalent Chromium (µg/L) 0.02 ND - 1.7 13 2017 n/a(a) chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; Nitrate [as N] (mg/L) 10 10 ND - 7.7 4.1 2017 erosion of natural deposits **Radioactive Constituents** Gross Alpha Activity (pCi/L) 15(b) (0)ND - 5.4 ND 2017 Erosion of natural deposits Uranium (pCi/L) 20 0.43ND - 23 18 2014 Erosion of natural deposits Secondary Standards -Aesthetic (units) Secondary MCI PHG (MCLG) Range of Detection Average Level Most Recent Sampling Date **Typical Source of Constituent** Aluminum (µg/L) 200 n/a ND - 110 60 2017 Erosion of natural deposits; residue from some surface water treatment processes Chloride (mg/L) 500 8 - 145 50 2017 n/a Runoff/leaching from natural deposits; seawater influence ND - 220 2017 300 ND Iron (µg/L) n/a Leaching from natural deposits; industrial wastes Manganese (mg/L) 50 n/a ND - 48 6.6 2017 Leaching from natural deposits ND Odor---Threshold (units) n/a ND - 1 2017 Naturally-occurring organic materials 1600 840 2017 Specific Conductance (uS/cm) n/a 148 - 1000 Substances that form ions when in water; seawater influence 204 Sulfate (mg/L) 500 n/a 30 - 270 2017 Runoff/leaching from natural deposits; industrial wastes Turbidity (units) n/a ND - 2.1 0.6 2017 Soil runoff Total Dissolved Solids (mg/L) 1000 n/a 77 - 700 570 2017 Runoff/leaching from natural deposits Most Recent Sampling Date Notification PHG (MCLG) Average Level Range of Other Parameters (units) **Typical Source of Constituent** Detection Level Alkalinity (mg/L) 160 2017 n/a n/a 24 - 200 2017 Calcium (mg/L) n/a 18 - 100 77 n/a The sum of polyvalent cations present in the water, generally magnesium and Hardness [as CaCO3] (mg/L) n/a n/a 32 - 380 310 2017 calcium; the cations are usually naturally occurring Hardness [as CaCO3] (grains/gal) 2 - 22 20 2017 n/a n/a 40 Magnesium (mg/L) n/a n/a 5 - 51 2017 pH (pH units) n/a n/a 7.8 - 8.0 7.9 2017 Potassium (mg/L) n/a n/a 1.7 - 2.7 2.4 2017 Sodium (mg/L) n/a n/a 24 - 54 47 2017 Refers to the salt present in the water and is generally naturally occurring Unregulated Drinking Water Constituents (units) Most Recent Sampling Date Notification PHG (MCLG) Range of Average Level Level Detection Vanadium (µg/L) 2014 50 n/a 3.4 - 5.243

Orcutt 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	
Chlorine [as Cl2] (mg/L)	(4.0)	(4)	ND - 2.2	1.06	2017	Drinking water disinfectant added for treatment	
HAA5 [Total of Five Haloacetic Acids] (μg/L)	60	n/a	ND - 19	17	2017	Byproduct of drinking water disinfection	
TTHMs [Total of Four Trihalomethanes] (µg/L)	80	n/a	ND - 37	17	2017	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)	AL = 1.3	0.3	None of the 30 samples collected exceeded the action level.	0.27	2017	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead sampling in schools and residential plumbing	Action Level	PHG	Range of Detection	Average Level	Sample Date	Typical Source	Number of Schools Requesting Lead Samples (c)
Lead (µg/L)	AL = 15	0.2	None of the 30 samples collected exceeded the action level for lead.	ND	2017	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	9

5.2

530

130

2014

2014

2014

Molybdenum (µg/L)

Strontium (µg/L)

Chlorate (µg/L)

3.4 - 9.0

340 - 610

ND - 270

n/a

n/a

800

n/a

n/a

n/a

⁽a) There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

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

⁽c) The State of California has made lead sampling in schools mandatory with a compliance window through 2019. The process requires each school to contact their water purveyor in order to initate the sampling.

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 December 2002 for each groundwater well serving the customers of its Orcutt System.

The groundwater well sources 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: apartments/condominiums, fire stations, gasoline station, high-density housing, oil wells, parks, water supply wells, storm drain discharge points, stormwater detention facilities, and roads/streets.

One of the groundwater well sources is considered most vulnerable to the following activities which have been associated with contaminants detected in the water supply: fertilizer/pesticide/herbicide application and irrigated crops.

A copy of the assessment may be viewed at:

DDW Coastal District Office 1180 Eugenia Pl., Suite 200, Carpinteria, CA 93013 or Golden State Water Company, Santa Maria Office 2330 A St., Ste. A, Santa Maria, CA 93455

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

DDW Coastal District Office at 1.805.566.1326

For more details, contact Bryan Rinde, Water Quality Engineer, at 1.800.999.4033.

In January 2003, the Central Coast Water Authority (CCWA) completed a source water assessment of its State Water Project supplies. CCWA supplies are considered to be most vulnerable to agricultural and irrigation wells. A copy of the CCWA assessment can be obtained by contacting CCWA by phone at 1.805.688.2292.

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.

Nitrate — Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant.

Chloramination — The water purchased by GSWC from Central Coast Water Authority (CCWA) 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 CCWA at 1.805.688.2292, extension 234.

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.

School Lead Testing — California Governor Jerry Brown signed legislation (AB 746) in October 2017 making lead testing mandatory for all California public K-12 schools constructed before Jan. 1, 2010. The legislation requires that testing be completed by July 1, 2019. To satisfy this legal requirement, Golden State Water is working with the schools in our service areas to test the drinking water at their facilities. There is no charge for this service, and any repairs that may be required could be eligible for funding through the State of California's Drinking Water for Schools Grant Program. Our experienced Water Quality team will provide free testing services at the school's drinking fountains, cafeterias, food preparation areas and other locations. Results will be reported to the school when they become available. To learn more about the school lead testing program and check if your school has been tested, please visit www.gswater.com/schools.

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

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/.

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/