

WATER NEWS

GOLETA WATER DISTRICT



INFORMATION ABOUT YOUR WATER

This year's annual report of water quality covers the 2001 calendar year and shows that Goleta Water District continues to maintain high standards that meet or exceed federal and state regulations.

If you have any questions concerning your water quality or this report, please contact our Laboratory Director Dije Ndreu at 879-4678.

If you want to learn more about water and the District, please attend any of our regularly scheduled Board meetings, normally held on the second Tuesday of each month at 7:00 p.m. in the District's Board Room at 4699 Hollister Avenue in Goleta.

We are proud of our excellent record on water quality and encourage you to review the detailed results in this report.

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

2002 CONSUMER CONFIDENCE REPORT

Our Commitment:

High Quality Water Each and Every Day

LAKE CACHUMA—A HIGH QUALITY SUPPLY



High-quality water comes from a watershed where potential contaminants are minimal or nonexistent.

WATER QUALITY—A TEAM EFFORT

A team of skilled, state-certified professionals work together full time to ensure the high quality of the water we provide to your homes and businesses.



DISINFECTION KEEPS IT CLEAN

Our treatment staff, headed by Water Treatment Superintendent Michael J. Alvarado and Chief Water Treatment Operator Greg Paul, carefully disinfects water supplies using precisely calculated amounts of chlorine. Chlorine prevents the growth of bacteria as the water travels through more than 229 miles of pipeline.



THOROUGH MONITORING

Our water quality team, led by Laboratory Supervisor Dije Ndreu, conducts a thorough program of daily, weekly, quarterly, annual, and semi-annual tests. Your drinking water is tested in our own state-certified lab and in contract labs. Automated equipment also monitors your water for some substances 24 hours a day.



DISTRIBUTION SYSTEM MAINTENANCE

Directed by Al Reginato, Distribution Supervisor, distribution operators maintain our pipelines, test each valve in the system, and flush the distribution system to ensure that high quality water is reliably delivered to our customers.



Our Water Passes the Test



In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the California Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

EPA Hotline

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 indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791) or by visiting the EPA website at <http://www.epa.gov/safewater/>.

Sources of Potential Contaminants

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 ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which 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, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

DEFINITIONS USED IN THE CHART:

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

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the

CA Environmental Protection Agency.

Primary Drinking Water Standard or PDWS: MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

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

Variations and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

NA: Not applicable.

ND: Not detected at testing limit.

ppb: Parts per billion or micrograms per liter.

ppm: Parts per million or milligrams per liter.

pCi/l: Picocuries per liter (measures radiation).

µmhos/cm: Micromhos per centimeter (an indicator of dissolved minerals in the water).

NTU: Nephelometric turbidity units (a measure of clarity).

FOOTNOTES:

1 In July 2001 a sample taken at University well had a detection of 1.3 ppb dichloromethane. University well was not in use at this time. An initial retest showed a level of 0.9 ppb dichloromethane. A second retest was non-detect for dichloromethane. We are continuing to monitor University well for this contaminant.

2 Coliform bacteria are indicator organisms that are found everywhere in nature and are not generally considered harmful. They are used because of their ease in monitoring and analysis. If a positive sample is found, it indicates a potential problem that needs to be investigated and follow up sampling done. In the month of December 2001, we collected 104 samples from our distribution system for coliform analysis. Of these samples, one was positive for coliform bacteria. Follow-up samples were all found to be negative for coliform bacteria.

3 Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

4 Turbidity of the filtered water must: 1) Be less than or equal to 0.5 NTU in 95% of measurements in a

month; 2) Not exceed 1.0 NTU for more than eight consecutive hours; 3) Not exceed 5.0 NTU at any time.

5 Unregulated contaminant monitoring helps EPA and the California Department of Health Services to determine where certain contaminants occur and whether the contaminants need to be regulated.

6 HAA5 is now regulated under the Disinfectants and Disinfection Byproducts Rule starting with samples taken in 2002. The new MCL is 60 ppb.

7 Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to

lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

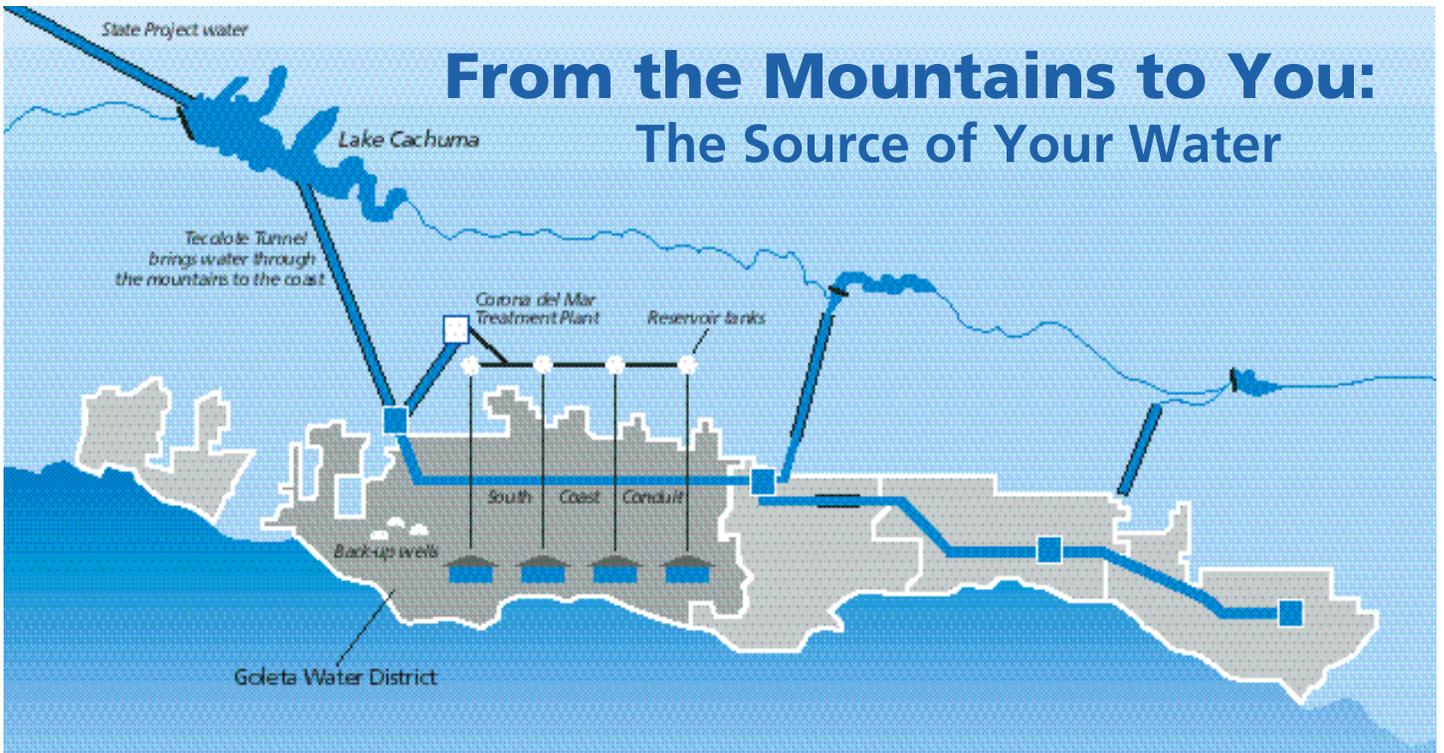
Note: The State allows use to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. All of the data presented in the tables are from samples taken in 2001, except for the following. The surface water gross alpha and uranium data were obtained in 1999. The surface water phosphate and radon data are from 2000. The groundwater gross alpha data were obtained in 1996, 1998 and 1999. The groundwater uranium and phosphate data are from 1999. The groundwater HAA5 data are from samples taken in 1999 and 2000.

Results of 2001 Drinking Water Quality Tests

These tables list drinking water contaminants and other substances detected during 2001. The District also tested for many additional substances that were not detected, and therefore are not listed in the report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The test results show that the District met all water quality standards.

Regulated Contaminants With Primary MCLs							
Inorganic	MCL	PHG (MCLG)	Surface Water Average	Surface Water Range	Groundwater Average	Groundwater Range	Typical Source of Contaminant
Aluminum (ppm)	1	NA	0.088	ND-0.130	0.097	ND-0.290	Erosion of natural deposits; residue from some surface water treatment processes
Fluoride (ppm)	2	1	0.46	0.40-0.56	0.33	0.28-0.37	Erosion of natural deposits
Nitrate (ppm)	45	45	ND		5.5	ND-17.1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Organic							
Dichloromethane	5	4	ND		ND	ND-1.3 ¹	Industrial solvents
THMs (Total Trihalomethanes) (ppb)	100	NA	56.3	36.8-75.3	36.3	ND-106.1	By-product of drinking water chlorination
Radiological							
Gross Alpha particle activity (pCi/l)	15	NA	2.2	ND-5.2	2.4	ND-4.7	Erosion of natural deposits
Uranium (pCi/l)	20	0.5	2.5		2.4	2.1-2.7	Erosion of natural deposits
Lead and Copper Rule	MCL	PHG (MCLG)	90th Percentile Value	# of Sample Sites	# of Sites Exceeding Action Level		Typical Source of Contaminant
Copper (ppm)	AL=1.3	0.17	0.33	30	0		Internal corrosion of household plumbing systems
Lead (ppb)	AL=15	2	ND (< 5)	30	0		Internal corrosion of household plumbing systems
Microbiological	MCL	PHG (MCLG)	Highest Single Measurement		Lowest Percentage of Samples Meeting TT		Typical Source of Contaminant
Total Coliform Bacteria (% of positive samples/month)	5	0	1 ²		NA		Naturally present in the environment
Turbidity ³ (NTU)	TT ⁴	NA	0.208		100%		Soil runoff
Unregulated Contaminants with Required Monitoring ⁵							
Constituent	Surface Water Average	Surface Water Range	Groundwater Average	Groundwater Range			
Boron (ppb)	295	260-330	202	ND-320			
Chromium VI(ppb)	ND		ND	ND-2			
Vanadium (ppb)	ND		ND	ND-4.8			
Regulated Contaminants With Secondary MCLs							
Constituent	Secondary MCL	Surface Water Average	Surface Water Range	Groundwater Average	Groundwater Range		Typical Source of Contaminant
Chloride (ppm)	500	15		103	16-276		Runoff/leaching from natural deposits; seawater influence
Color (units)	15	ND	ND-20	5	ND-10		Naturally-occurring organic materials
Iron (ppb)	300	ND		218	ND-910		Leaching from natural deposits
Manganese (ppb)	50	ND		27	ND-87		Leaching from natural deposits
Odor—Threshold (units)	3	1	ND-4	2	1-4		Naturally-occurring organic materials
Specific Conductance (µmhos/cm)	1600	832	743-1199	934	680-1370		Substances that form ions when in water
Sulfate (ppm)	500	240		217	135-265		Runoff/leaching from natural deposits
Total Dissolved Solids (ppm)	1000	544	508-580	713	580-940		Runoff/leaching from natural deposits
Turbidity (NTU)	5	0.164	0.052-3.07	2.4	0.2-6.7		Soil runoff
Other Constituents							
Constituent	Surface Water Average	Surface Water Range	Groundwater Average	Groundwater Range			
Alkalinity (ppm as CaCO ₃)	157	123-190	166	153-179		Variance: Goleta Water District (GWD) serves unfiltered Lake Cachuma water to about 33 connections on the Goleta West Conduit. The water receives chlorination treatment but does not comply with the Surface Water Treatment Rule (SWTR). The State Department of Health allows GWD to provide bottled water to these customers for drinking and cooking as a permanent solution. GWD notifies these consumers quarterly that the water delivered is not in compliance with the SWTR and should not be used for domestic purposes.	
Bicarbonate (ppm)	194		202	186-218			
Calcium (ppm)	73		105	79-150			
Chlorine Residual (ppm)	0.91	0.20-1.91	NA	NA			
HAA5 ⁶ (sum of five haloacetic acids) (ppb)	21.2	4.7-40.8	12.9	ND-23.0			
Hardness (ppm as CaCO ₃)	333	264-404	414	358-502			
Magnesium (ppm)	38		37	31-41			
pH (units)	7.70	7.23-8.12	7.6	7.2-7.9			
Phosphate (ppm)	ND		0.22	0.21-0.23			
Potassium (ppm)	2.2		2.2	1.3-2.7			
Radon ⁷	ND		572	230-790			
Silica (ppm)	14	21-15	22	16-32			
Sodium (ppm)	45		58	46-81			





From the Mountains to You: The Source of Your Water

Goleta's Main Source of Water Is Lake Cachuma

The water is treated at the Corona del Mar Water Treatment Plant. The District also maintains a number of standby wells for emergency use. In 2001, Anita and University wells were used sporadically to provide water when the treatment plant was undergoing maintenance. In addition, Sierra Madre well was used from August through October, contributing less than 1% of the water produced during this period. The District also maintains a number of standby wells for emergency use. The District also has access to imported water from Northern California.

In general, the District has an ample water supply from Lake Cachuma, leaving groundwater and imported water in reserve in the event of drought or disruption in the normal supply.

Source Water Assessment

A source water assessment of Lake Cachuma was completed in December 2000, as an attachment to the District's Watershed Sanitary Survey Update. This water source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: gas stations and recreational watercraft. In addition, this water source is most vulnerable to the following activity, for which no associated contaminant has been detected: historic mining operations. Assessments of the Anita and University wells were completed in January 2002. Anita well is considered most vulnerable to the following activities: automobile gas stations and confirmed leaking underground storage tanks. No contaminants associated with these activities have been detected in Anita well. University well is considered most vulnerable to the presence of injection wells. The District operates these injection wells as part of an aquifer storage and recovery project and closely monitors the quality of the treated surface water that is injected.

A copy of the complete assessments is available at the District's main office. You may request a summary of the assessments by contacting Operations Manager Michael Kanno at 879-4630.

When to Seek Health Care Advice

Some people may be more vulnerable to contaminants in drinking 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, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. 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).

♻️ Printed on recycled paper. Each ton of recycled paper saves 7,000 gallons of water.

Our goal is to provide an adequate supply of quality water at the most reasonable cost to the present and future customers within the Goleta Water District.

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