### Source Water Assessment

A source water assessment is an important tool for protecting water quality. It identifies how potential contaminants can affect a water source, and potential contamination vulnerabilities. A source water assessment is required for surface water every five years. The most recent one was completed for Lake Cachuma in March 2011. An assessment of all active District groundwater wells was completed in January 2002, and an assessment of the Sierra Madre Well was completed in April 2003. Operating conditions surrounding the wells have not changed since that time, so an updated assessment has not been necessary. Copies of the completed assessments are available at the District's main office. You may request a summary of the assessments by contacting Tom Bunosky, District Operations Manager at (805) 879-4630.

**Drinking Water Info.** 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).



# **How We Provide Top Quality Water**

State Certified Operators and Round-the-Clock Monitoring. Our water treatment operators are all state-certified water treatment professionals and are on the job every day to ensure your water always meets quality standards.

**Extensive Testing**. The District conducts thousands of tests each year, using automated test equipment that continually analyzes water at different steps in the treatment process. Other tests are conducted in our own laboratory and also by independent state-certified laboratories.

Modern Updated Treatment Plant. The District carried out significant improvements to the treatment plant in 2000 and 2007. Currently, the District is preparing for another round of major upgrades. These upgrades and operational improvements will enable the District to continue providing cost-effective, quality service.

Backup Systems to Ensure Quality. The treatment plant includes backup equipment for key systems to increase reliability during emergencies, high-water-use days, and during maintenance or interruptions.

## Water in the Environment

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, which 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, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

## **People With Sensitive Immune Systems**

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).

The District's testing is extremely accurate. Based on the substance, we can detect to the equivalent of one hundredth of a part in a billion parts of water. This is the equivalent to finding one drop of a substance in 1,300,000 gallons of water.

# **FEBRUARY 2013**



INFORMATION

ABOUT YOUR WATER

and State Quality

Strict Federal

In order to ensure that

the U.S. Environmental

Department of Public

tap water is safe to drink,

(USEPA) and the California

Health (Department) pre-

scribe regulations that limit

the amount of certain con-

by public water systems.

taminants in water provided

Department regulations also

establish limits for contami-

nants in bottled water that

must provide the same pro-

tection for public health.

**Can Get Involved** 

Directors normally meets

the second Tuesday of each

month at 5:30 p.m. in the

4699 Hollister Avenue in

welcome to participate in

For more informa-

at (805) 879-4630.

Este informe contiene información muy impor-

potable. Tradúzcalo o

hable con alguien que lo

tante sobre su agua

entienda bien.

tion about your

water, contact

Tom Bunosky

these meetings.

Goleta. The public is always

District Board Room at

Our District Board of

How You

Regulations

Protection Agency

# **CONSUMER CONFIDENCE REPORT Results of Extensive Water Quality Testing for 2012**

water quality.

The report explains in detail how we maintain high quality standards, and offers other useful information, including a description of where your water comes from and answers to common questions about water quality and health issues.

Quality water starts with a quality supply. Your Water District is fortunate to receive most of its water supply from Lake Cachuma. Surrounded by Los Padres National forest, Lake Cachuma is well protected from urban and agricultural runoff.



**Our State-Certified water treatment plant monitors** your water quality around-the-clock. We are committed to providing our customers with high-quality water at the lowest reasonable cost.

We are pleased to provide you with this report on your

In addition to Lake Cachuma, the District maintains a number of backup wells. The following wells were used in 2012: Airport, El Camino, University, San Antonio, San Marcos, and Sierra Madre.

## **Results of 2012 Drinking Water Quality Tests**

The tables to the right list drinking water contaminants and other substances detected during 2012. The District also tested for many additional substances that were not detected, and therefore are not listed in this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data is for testing done January 1-December 31, 2012.

**PUBLIC NOTICE.** In 2011 Goleta Water District did not monitor Sierra Madre Well #1 for Nitrate. The District is required to monitor the well even though it was not used during 2011. The District is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. Goleta Water District has since tested the well for nitrate and the results are less than the Maximum Contaminant Level (MCL).

Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail.

For additional information concerning the public notice contact Tom Bunosky, Operations Manager, Goleta Water District, 4699 Hollister Avenue, Goleta, CA 93110-1999, (805) 879-4630.

#### **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 California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that 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 the MRDL 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.

N/A: Not applicable.
ppb: Parts per billion or micrograms per liter.
<b>pCi/I:</b> Picocuries per liter (a measure of radiation).
NTU: Nephelometric turbidity units.

ND: Not detected at testing limit. **ppm:** Parts per million or milligrams per liter. µmhos/cm: Micromhos per centimeter (an indicator of dissolved minerals in the water). Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

#### **FOOTNOTES TO THE CHART:**

Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.

- <sup>2</sup> 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. Goleta Water District is responsible for providing high guality 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 2 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 on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.
- <sup>3</sup> 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
- <sup>4</sup> Turbidity of the filtered water must: 1) Be less than or equal to 0.3 NTU in 95% of measurements in a month; 2) Not exceed 1.0 NTU.
- <sup>5</sup> Conventional surface water treatment plants must remove a certain percentage of the total organic carbon (TOC) in their raw intake water using a specialized enhanced coagulation treatment technique. The percentage removal required depends on raw water quality characteristics. For Goleta Water District's Corona del Mar Water Treatment Plant's raw water source, the required percentage was 15%. Due to the nature of Corona del Mar Water Treatment Plant's raw water, the water is non-amenable to removal of TOC via enhanced coagulation. Goleta Water District has a permitted waiver from this treatment requirement from the California Department of Public Health
- <sup>3</sup> Radon is a radioactive gas that you cannot 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. You should pursue radon removal for 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 are not too costly. For additional information, call your State radon program (1-800-745-7236), the EPA Safe Drinking Water Act Hotline (1-800-426-4791), or the National Safety Council Radon Hotline (1-800-SOS-RADON).

NOTE: The State allows us 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 surface water data presented in the tables are from samples taken in 2012, except for the following: The radiological data is from 2011. The radon data is from 2006. All of the groundwater data presented in the tables are from samples taken in 2012, except for the following from 2011 and 2012: aluminum, arsenic, fluoride, chloride, sulfate, alkalinity, bicarbonate, calcium, hardness, magnesium, potassium, and sodium. The radon data is from 2003 and 2006.

REGULATED CONTAMINANTS WITH PRIMARY MCLS								
INORGANIC	MCL	PHG (MCLG)				Groundwater Range	Typical Source of Contaminant	
Aluminum (ppm)	1	0.6	0.049	0.035-0.066	0.050	ND-0.066	Erosion of natural deposits; residue from some surface water treatment processes	
Arsenic (ppb)	10	0.004	2.4	N/A	ND	ND-2.4	Erosion of natural deposits; runoff from orchards; glass and electronics production	
Fluoride (ppm) Nitrate as NO3 (ppm)	2.0 45	1 45	0.33 ND	N/A N/A	0.33 5.9	0.26-0.40 ND-19	Erosion of natural deposits Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Perchlorate (ppb)	6	6	ND	N/A	ND	ND-4.3	See footnote #1	
RADIOLOGICAL								
Gross Alpha particle activity (pCi/l)	15	(0)	ND	N/A	ND	ND-5.08	Erosion of natural deposits	
Radium 228 (pCi/I)	5	0.019	1.44	N/A	ND	ND-ND	Erosion of natural deposits	
Uranium (pCi/I)	20	0.43	1.2	N/A	1.4	ND-5.3	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	0.3	0.60	34		0	Internal corrosion of household plumbing	
Lead <sup>2</sup> (ppb)	AL = 15	0.2	ND	34	0		Internal corrosion of household plumbing	
MICROBIOLOGICAL	MCL	PHG (MCLG)	Highest Measu		Lowest Percentage of Samples Meeting TT		Typical Source of Contaminant	
Turbidity <sup>3</sup> (NTU)	TT <sup>4</sup>	N/A	0.0			0%	Soil runoff	
DISINFECTION BYPRODUCTS (DBP), DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS	MCL or [MRDLG]	PHG (MCLG) or [MRDLG]	System Average		System Range		Typical Source of Contaminant	
TTHMs [Total Trihalomethanes] (ppb)	80	N/A	55	.3	4.6-66.0		Byproduct of drinking water disinfection	
Haloacetic Acids (ppb)	60	N/A		22.0 ND-		-26.0	Byproduct of drinking water disinfection	
Chlorine (ppm)	$[MRDL = 4.0 (as Cl_2)]$		1.18		0.35-2.14		Drinking water disinfectant added for treatment	
Control of DBP precursors (TOC in ppm)	TT <sup>5</sup>	N/A	2.	7	2.5	-2.9	Various natural and manmade sources	
		REGULATED	CONTAMINANTS	WITH SECON	DARY MCLS			
CONSTITUENT	Secondary MCL	Surface Water Average	Surface Water Range	Groundwater Average	Groundwater Range		Typical Source of Contaminant	
Chloride (ppm)	500	17.5	17-18.0	106	16-450		Runoff/leaching from natural deposits; seawater influence	
Color (units)	15	ND	ND-5	ND	ND-7.5		Naturally occurring organic materials	
Copper (ppm) Iron (ppb)	1.0 300	ND ND	N/A N/A	ND ND	ND-0.130 ND-260		Internal corrosion of household plumbing Leaching from natural deposits; industrial wastes	
Manganese (ppb)	50	ND	N/A	ND	ND-36		Leaching from natural deposits	
Odor—Threshold (units)	3	1	1-3	1	1-3		Naturally-occurring organic materials	
Specific Conductance (µmhos/cm)	1600	879	815-1527	1188	864-1980		Substances that form ions when in water	
Sulfate (ppm)	500	270	N/A	228	110-260		Runoff/leaching from natural deposits	
Total Dissolved Solids (ppm)	1000 5	584 0.133	567-600 0.050-0.789	850 0.170	600-1500 0.012-1.37		Runoff/leaching from natural deposits Soil runoff	
Turbidity (NTU)	5	0.155			0.01	2-1.37		
			OTHER CONS					
CONSTITUENT		Surface Water Average	Surface Water Range	Groundwater Average		idwater nge		
Alkalinity (ppm as CaCO <sub>3</sub> )		161	141-172	240	160-320		Variance: Goleta Water District (GWD)	
Bicarbonate (ppm)		180	N/A	295		-380	serves unfiltered Lake Cachuma water to about 33 connections on the Goleta West	
Calcium (ppm)		72	N/A	133 490	90-190 390-640		Conduit. The water receives chlorination	
Hardness (ppm as CaCO,) Hexavalent Chromium (ppb)		347 ND	306-450 ND-0.027	490 0.26	390-640 ND-1.5		treatment but does not comply with the Surface Water Treatment Rule (SWTR).	
Magnesium (ppm)		41	N/A	38	34-41		The State Department of Public Health	
pH (units)		7.29	6.81-7.60	7.12	6.88-7.43		allows GWD to provide bottled water to	
Potassium (ppm)		3.1	N/A	2.7	1.6-4.2		these customers for drinking and cooking. GWD notifies these consumers quarterly tha	
Radon <sup>6</sup> (pCi/l)		ND	N/A	384		-853	the water delivered is not in compliance with	
Sodium (ppm)		44	N/A	70	42-	-110	the SWTR and should not be consumed.	