



County of San Luis Obispo - Department of Public Works

County Service Area 10/10A - Cayucos

2009 Water Quality Report

June 2010

TO OUR CUSTOMERS: The County of San Luis Obispo is pleased to present this annual report describing the quality of your drinking water. We sincerely hope this report gives you the information you seek and have a right to know. *Este informe contiene información muy importante sobre su agua de beber. Tradúzcalo ó hable con alguien que lo entienda bien.*

SOURCES OF DRINKING WATER

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, which 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.



Whale Rock Reservoir is the primary water supply for Cayucos.

- **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, and septic systems.
- **Radioactive contaminants** which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the

2009 Water Statistics

CSA 10A Delivered:

43.7 million gallons

Average Daily Demand:

120,000 gallons

Total Water Delivered (CSA 10A, PRBA, MRMWC):

131 million gallons

Average Daily Demand:

360,000 gallons

California Department of Public Health (CDPH) prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water which must provide the same protection for public health.

YOUR WATER SUPPLY

The primary source of water for Cayucos is surface water from the Whale Rock Reservoir. Whale Rock Reservoir has a total capacity of 40,660 acre-feet. The reservoir is managed by the Whale Rock Commission comprised of the City of San Luis Obispo, the California Men's Colony, and Cal Poly. No swimming or other body contact sports are allowed on the reservoir in order to minimize viral contamination from human contact. Water from the reservoir is piped downstream to the Cayucos Water Treatment Plant (WTP) where it is treated by a filtration system followed by chlorination. Prior to chlorination, a percentage of the water is passed through two granular activated carbon filters. In addition, Cayucos has a groundwater well, the Whale Rock Well (CAWO Well). In 2008, the CAWO Well provided less than 1.3% of the total water produced.

Treated water from the Cayucos WTP is dis-

tributed to the Cayucos Area Water Organization (CAWO) which consists of three water agencies: San Luis Obispo County Service Area 10A, Paso Robles Beach Water Association (PRBA), and Morro Rock Mutual Water Company (MRMWC). These three agencies have a combined entitlement of 190 million gallons of water per year that can be drawn from the Whale Rock Reservoir or the CAWO Well. In 2008, the Cayucos WTP provided 131 million gallons of water to the CAWO agencies.

A Source Water Assessment of the watersheds above and below Whale Rock Reservoir, the CAWO well, and the standby wells was updated in 2005. The assessment was conducted to locate potential sources of contamination and to evaluate the ability of the water treatment plant and wells to handle the contamination. The updated study

included a review of water system information, meetings with water system staff, and field surveys. No significant changes were noted in the watersheds. The source assessment continues to conclude that the wells are most vulnerable to the following activities for which no associated contaminants have been detected in the water supply: Sewer collection system, low-density septic systems, agricultural drainage and an agricultural well. A copy of the assessment is available at: County of San Luis Obispo, Department of Public Works, County Government Center, Room 207, San Luis Obispo, CA 93408.

You may also request a summary of the assessment be sent to you by contacting Kurt Souza, Regional Engineer at CDPH, at 805-566-1326 or John Beaton, Water Quality Manager, at 805-781-5111.

The County routinely monitors for many more chemicals than are listed in this table. The tables list all of the drinking water contaminants that were detected in 2009, unless otherwise noted. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. 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, although representative, may be more than one year old. For questions about this data, contact John Beaton, Water Quality Manager, at (805) 781-5111 or email JBeaton@co.slo.ca.us. Delivered Water is a combination of water from two sources, CAWO Well and Whale Rock Reservoir. CAWO Well provided 1.3% and Whale Rock Reservoir (Treated) 97.8% of the water delivered. A flow-weighted average is used to provide a more accurate representation of the water delivered to your home.

Regulated Contaminants with Primary MCLs, MRDLs, TTs or ALs							
Contaminant (reporting units)	MCL	PHG (MCLG)	Level Found	Violation	Potential Source of Contamination		
FILTRATION PERFORMANCE							
Turbidity (NTU)	TT = 1NTU	----	0.12	No	Surface water runoff		
	TT = 95% of samples ≤ 0.3 NTU	----	100%	No			
Contaminant (Reporting Units)	Where sampled	MCL	PHG (MCLG)	Range detected	Average detected	Potential Source of Contamination	
MICROBIOLOGICAL CONTAMINANTS							
Total Coliform Bacteria (Present or Absent)	Distribution	> 1 positive sample per month	(0)	ND	ND	Naturally present in the environment	
Heterotrophic Bacteria (CFU/mL)	Distribution	TT = < 500	----	ND—22	4	Naturally present in the environment	
RADIOACTIVE CONTAMINANTS							
Gross Alpha Particle Activity (pCi/L)	Delivered	15	----	ND—2.59 (2004)	ND	Erosion of natural deposits	
INORGANIC CONTAMINANTS							
Aluminum (ppm)	Delivered	1	0.6	ND—0.080	0.040	Residue from some surface water treatment processes.	
Arsenic (ppb)	Delivered	10	0.004	ND—2.2	2.2	Erosion of natural deposits	
Fluoride (ppm)	Delivered	2.0	1	0.380—0.382	0.38	Erosion of natural deposits	
DISINFECTANT RESIDUALS and DISINFECTION BYPRODUCTS (DBP)							
Chlorine (ppm)	Distribution	4.0 as Cl ₂	4 as Cl ₂	0.22—1.56	0.95	Drinking water disinfectant added for treatment.	
Haloacetic Acids (ppb)	Distribution	RAA = 60	----	9.5—16	11	Byproduct of drinking water disinfection	
Total Trihalomethanes (ppb)	Distribution	RAA = 80	----	28—73	63	Byproduct of drinking water disinfection	
TOC (DBP precursor) (% Removal)	Delivered	----	----	7%—74%	26%	Various natural and manmade sources	
LEAD AND COPPER IN HOMES (2008)							
Contaminant	Where sampled	MCL	PHG	Number of Samples Collected	90th Percentile Level Detected	Number of Sites found above the AL	Potential Source of Contamination
Copper (ppb)	Homes	AL=1300	300	11	560	0	Internal corrosion of household water plumbing systems
Lead (ppb)	Homes	AL= 15	0.2	11	ND	0	
CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD (AESTHETICS)							
Contaminant (Reporting Units)	Where sampled	MCL	PHG (MCLG)	Range detected	Average detected	Potential Source of Contamination	
Aluminum (ppb)	Delivered	200	600	ND – 80	80	Residue from some surface water treatment processes.	
Chloride (ppm)	Delivered	500	----	31.6—42.8	32	Runoff/leaching from natural deposits	
Color (CU)	Distribution	15	----	ND—1	ND	Naturally occurring organic materials	
Manganese (ppb)	Delivered	50	----	ND—20	ND	Leaching from natural deposits	
Odor – Threshold (TON)	Distribution	3	----	1.0—1.9	1.5	Naturally occurring organic materials	
Specific Conductance (µS/cm)	Delivered	1600	----	650—780	650	Runoff/leaching from natural deposits	
Turbidity (NTU)	Distribution	5	----	0.04—0.20	0.07	Soil runoff	
Total Dissolved Solids (ppm)	Delivered	1000	----	380—460	380	Runoff/leaching from natural deposits	
Sulfate (ppm)	Delivered	500	----	42.0—75.9	76	Runoff/leaching from natural deposits	

UNREGULATED CONTAMINANTS						
Contaminant (Reporting Units)	Where sampled	MCL	PHG (MCLG)	Range detected	Average detected	Potential Source of Contamination
Total Alkalinity as CaCO ₃ (ppm)	Delivered	NS	-----	230—340	230	Runoff/leaching from natural deposits; seawater influence.
Calcium (ppm)	Delivered	NS	-----	40—59	40	Runoff/leaching from natural deposits.
Total Hardness (ppm)	Delivered	NS	-----	260—330	260	Generally found in ground and surface water; seawater influence.
Magnesium (ppm)	Delivered	NS	-----	40—45	40	Runoff/leaching from natural deposits; seawater influence.
pH	Delivered	NS	-----	7.63—8.05	8.05	Runoff/leaching from natural deposits; seawater influence.
Sodium (ppm)	Delivered	NS	-----	38—45	38	Runoff/leaching from natural deposits; seawater influence.

KEY TERMS and ABBREVIATIONS

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

CDPH: California Department of Public Health

CFU/mL: Colony Forming Units per milliliter

DBP: Disinfection Byproduct

MCL (Maximum Contaminant Level): 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.

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

MRDL (Maximum Residual Disinfectant Level): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

NA: Not Applicable

ND (Not Detected): Contaminant is not detectable at testing limit.

NS: No Standard

NTU: Nephelometric Turbidity Unit

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

PHG (Public Health Goal): 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.

pCi/L: (picoCuries per liter) a measure of radioactivity.

ppm: parts per million, or milligrams per liter (mg/L)

ppb: parts per billion, or micrograms per liter (µg/L)

RAA (Running Annual Average): Average data for last four quarters.

SDWS (Secondary Drinking Water Standard): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect health at the MCL levels.

TON: Threshold Odor Number

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

µS/cm (microSiemens per centimeter): A measure of electrical conductance. (1 S = 1 ohm⁻¹)

DRINKING WATER AND HEALTH RISKS

All 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 the 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.

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. The USEPA and Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1(800) 426-4791.

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. The County of San Luis Obispo 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 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>.



Repair work and repainting of the Hacienda tank was completed.

PUBLIC PARTICIPATION

The San Luis Obispo County Board of Supervisors meets every Tuesday (except the 5th Tuesday in a month) at 8:30am in the board chambers located in the new Government Center, 1055 Monterey Street, San Luis Obispo. The Board holds budget hearings during the month of June. Interested persons should check the Board's agendas for specific dates. Agendas for all Board of Supervisors meetings are posted in some County libraries, the County Government Center, and on the Board of Supervisors internet web site at www.slocounty.ca.gov.

The Cayucos Citizens Advisory Committee meets the first Wednesday of each month at the Cayucos Veterans Hall at 7:00 pm. The Cayucos Area Water Organization meets the first Monday of each month at the Cayucos Fire Station at 1:30 pm.



The GAC filters for improving taste and odor and removing DBP precursors.

IMPORTANT INFO

In 2010/2011, SLO County staff plan to repaint the clearwell tank located at the Water Treatment Plant.

With the projected finish date for the Nacimiento pipeline of December, 2010, CSA 10A will have enough supplemental water to meet build-out needs via an exchange agreement with the City of San Luis Obispo for an equivalent amount of Whale Rock Reservoir water.

In order to provide the necessary storage for peak demand, fires and emergencies for both now and at build-out, SLO County staff are currently looking to add a new storage tank and access road. Much consideration is being given to tank location, acquiring property, and the designing and installation of the tank.

OPERATIONS

The Cayucos water system is operated by qualified operators who are all certified by the California Department of Public Health (CDPH). They are knowledgeable professionals dedicated to maintaining the Cayucos water system in an excellent condition in order to provide you with the best quality water possible.

Operators are continually inspecting the water treatment plant, Whale Rock Reservoir, wells, tanks, and distribution system in order to ensure safe and reliable water. In addition, the CDPH routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.



We're on the Web! www.slocountywater.org