COUNTY OF SAN LUIS OBISPO—DEPARTMENT OF PUBLIC WORKS

CAYUCOS - County Service Area #10/10A
2008 Water Quality Report

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 informacíon muy importante sobre su agua de beber.
Tradúzcalo ó hable con alguien que lo entienda bien.

June, 2009

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% of the total water produced.

Treated water from the Cayucos WTP is distributed 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, and Morro Rock Mutual Water Company. 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 134.4 million gallons of water to the CAWO agencies.

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.
- *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 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.

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.

CDHS: California Department of Health Services

CFU/mL: Colony Forming Units per milliliter

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.

Micromhos/cm (Micromhos per centimeter): A measure of electrical conductance.

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.

COMMUNITY 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.

Much emphasis is being placed on future water needs for Cayucos, especially customers in CSA 10A. Look for discussion of supplemental water options at both town hall meetings and Board of Supervisors meetings. Contact the Public Works Department at 781-5252 for details.

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.

WATER TESTING

Water analyses are performed by the San Luis Obispo County Water Quality Laboratory (SLOCWQL) or contracted to another certified laboratory. The SLOCWQL is certified by the CDPH as an environmental testing laboratory for bacteriological and chemical analyses. Federal and State requirements dictate that all regulatory analyses be performed by certified labs following approved procedures.

SOURCE WATER ASSESSMENTS

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 <u>for which no associated contaminants have been detected in the water supply</u>: Sewer collection system, low-density septic systems, agricultural drainage and an agricultural well. To obtain a copy of the complete assessment contact:

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IMPORTANT INFORMATION

2008 Water Statistics

CSA 10A Delivered: 45.3 million gallons

Average Daily Demand: 124,000 gallons

Morro Rock Mutual Water Company Delivered: 37.7 million gallons

Average Daily Demand: 103,000 gallons

Paso Robles Beach Water Association Delivered: 51.4 million gallons

Average Daily Demand: 141,000 gallons

Total Water Delivered: 134.4 million gallons

Average Daily Demand: 368,000 gallons

2007 Water Statistics

CSA 10A Delivered: 46million gallons

Average Daily Demand: 127,000 gallons

Morro Rock Mutual Water Company Delivered: 40 million gallons

Average Daily Demand: 108,000 gallons

Paso Robles Beach Water Association Delivered: 54 million gallons

Average Daily Demand: 147,000 gallons

Total Water Delivered: 139 million gallons

Average Daily Demand: 382,000 gallons

SCHEDULED SYSTEM IMPROVEMENTS

In 2009/2010, SLO County staff plan to repaint the clearwell tank located at the Water Treatment Plant and perform repairs on and repaint the main water tank located on the top end of Hacienda Drive.

With the projected finish date for the Nacimiento pipeline of December, 2010, the Cayucos Water Treatment Plant is anticipating an increase in their entitlement for Whale Rock Reservoir water. In order to increase the amount of water storage, SLO County staff are currently looking to add a new 350,000 gallon storage tank and an access road to the tank. Much consideration is being given to tank location, acquiring property, and the designing and installation of the tank. This new tank will provide the necessary storage for peak flows, improved fire flow, and emergency storage.

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.
Once every three years samples are collected from households throughout the community to test for lead and copper, which can leach out of some household plumbing. Houses that are most likely to have lead and copper in their water are selected for this study—that is, we deliberately look for the “worst case” houses. In 2008, eleven Cayucos (CSA -10A) households participated in this study. In all cases, lead was not detected , and copper was detected at levels that are well within drinking water standards (see enclosed data table for more detail). We appreciate the volunteers who participated in this study; you help us to be sure we are providing the safest possible drinking water for the community. 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 at **1(800)426-4791 or at *http://www.epa,gov/safewater/lead*.**

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HELP SAVE OUR WATER!!

Water is essential to each of us every day. But it is a limited resource, so we need to rethink the way we use water on a daily basis. By following these water-saving tips inside your home, you can save water every day.

* Take shorter showers
* Turn off the faucet when brushing your teeth
* Only wash full loads of laundry
* Run the dishwasher only when full
* Fix leaky faucets and
* Water your lawn only when it needs it
* Use a broom to clean driveways and sidewalks
* Adjust sprinklers so they don't water driveways and sidewalks
* Use a shut-off nozzle on your hose
* Plant California-friendly trees and plants

INFORMATION ON THE INTERNET

The U.S. EPA Office of Water (**www.epa.gov/watrhome**) and the Centers for Disease Control and Prevention (**www.cdc.gov**) websites provide information on many issues relating to water resources, water conservation, and public health.
Information can also be obtained by accessing the American Water Works Association's website (**www.awwa.org**) or the California Department of Public Health website (**www.cdph.ca.gov)**.
To find this report and other SLO County information, go to **www.slocountywater.org** and click on "Water Quality Lab" or go directly to **www.slocounty.ca.gov/PW/WaterResources/WQL.htm** .

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, contact
John Beaton, Water Quality Manager, at (805) 781-5111 or Email: jbeaton@co.slo.ca.us

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2008 WATER QUALITY DATA TABLE for CAYUCOS, CSA No. 10 and CSA No. 10A

During the year 2008, hundreds of water samples were collected in order to determine the presence or absence of any biological, radioactive, inorganic or organic contaminants in your drinking water. The following table lists all of the drinking water contaminants that were detected in 2008 or in the most recent sampling event prior to 2008. The presence of these contaminants in water does not necessarily indicate that the water poses a health risk. Numerous other substances were tested for, but were not detected and will not appear in the table below. The California Department of Public Health does not require us to monitor for certain contaminants every year, because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data in the table, may be more than one year old, but is still representative of the water quality. In these cases, the most recent sample data are included along with the year in which the sample was collected.

TREATMENT of SURFACE WATER SOURCES

The treatment techniques used at the Cayucos Water Treatment Plant are filtration and chlorination .

Turbidity Performance Standard - Turbidity is a measure of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system and overall water quality. When turbidity results meet performance standards, we are considered to be in compliance with filtration requirements.

Turbidity Performance Standards require that the turbidity of filtered water must: 1 - Be less than or equal to 0.3 NTU in 95% of the measurements in a month. 2 - Not exceed 1.0 NTU for more than eight consecutive hours. 3 - Not exceed 5 NTU at any time.	Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: **100** Highest single turbidity measurement during the month: **0.29 NTU** Number of violations of any surface water treatment requirements: **NONE**

DETECTION OF CONTAMINANTS WITH PRIMARY DRINKING WATER STANDARDS: Regulated in Order to Protect Against Possible Adverse Health Effects

MICROBIOLOGICAL CONTAMINANTS

Contaminant	Reporting Units	Where Sampled	Year Sampled	Average	Range	MCL	PHG (MCLG)	Potential Source of Contamination
Total Coliform Bacteria	Present or Absent	Distribution	2008	Not Detected	Not Detected	More than 1 sample in a month with a detection	(0)	Naturally present in the environment
Heterotrophic Plate Count	CFU/mL	Distribution	2008	4	ND - 46	TT = adequate disinfection (HPC < 500 CFU/mL)	(0)	Naturally present in the environment

LEAD AND COPPER AT CONSUMER'S HOMES

Contaminant	Reporting Units	Where Sampled	Year Sampled	No. of samples collected	90th percentile level detected	No. of sites exceeding the action level	Action Level	PHG	Potential Source of Contamination
Lead	ppb	Homes	2008	11	ND	0	15	2	Internal corrosion of household water plumbing systems; erosion of natural deposits
Copper	ppb	Homes	2008	11	560	0	1300	170	

DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS

Contaminant	Reporting Units	Where Sampled	Year Sampled	Highest Running Annual Average	Range Detected	MCL	PHG	Potential Source of Contamination
Total Trihalomethane	ppb	Distribution	2008	64	53 - 71	RAA = 80	NA	By-product of drinking water chlorination
Haloacetic Acids	ppb	Distribution	2008	15	11 -18	RAA = 60	NA	By-product of drinking water disinfection
Chlorine Residual	ppm	Distribution	2008	1.02 (Yearly Average)	0.40 - 1.63	4.0 (as Cl2)	4	Drinking water disinfectant added for treatment
Total Organic Carbon (Control of DBP precursors)	Percent removal	Treatment Plant	2008	27% (Yearly Average)	21% - 58%	TT = adequate disinfection	NA	Various natural and manmade sources

2008 Water Quality Data for Cayucos (continued)

RADIOACTIVE CONTAMINANTS								
Contaminant	Reporting Units	Year Sampled	Treated Water Average (Range)	Year Sampled	CAWO Well (Provided 0.34% of Delivered water in 2008) Average (Range)	MCL	PHG (MCLG)	Potential Source of Contamination
Gross Alpha Particle Activity	pCi/L	2007	Not Detected	2004	1.85 (1.15 - 2.59)	15	(0)	Erosion of natural deposits
Radium 228	pCi/L	2004	0.34 (0.27 - 0.461)	2004	0.29 (ND - 0.554)	Combined Radium=5	(0)	Erosion of natural deposits
INORGANIC CONTAMINANTS								
Aluminum	ppb	2008	130	2006	ND	1000	600	Erosion of natural deposits; treatment process residue
Arsenic	ppb	2008	2	2006	ND	10	0.004	Erosion of natural deposits; runoff from orchards
Barium	ppb	2008	100	2006	23	1000	2000	Erosion of natural deposits
Fluoride	ppm	2008	0.35	2006	0.3	2	1	Erosion of natural deposits
Nitrate	ppm	2008	ND	2008	1.4	45	45	Erosion of natural deposits

Detection of Contaminants with a Secondary Drinking Water Standard (to protect aesthetics i.e., odor, taste, and appearance)

Contaminant	Reporting Units	Year Sampled	Treated Water Average (Range)	Year Sampled	CAWO Well (Provided 0.34% of Delivered water in 2008) Average (Range)	MCL	PHG (MCLG)
Aluminum	ppb	2008	130	2006	ND	200	Erosion of natural deposits; treatment process residue
Chloride	ppm	2008	29	2007	39 (37 - 42)	500	Runoff/leaching from natural deposits; seawater influence
Manganese	ppb	2008	ND	2007	46 (45 - 47)	50	Leaching from natural deposits
Specific Conductance	micromohs/	2008	640	2007	780 (770 - 800)	1600	Substances that form ions when in water; seawater influence
Sulfate	ppm	2008	72	2007	40 (37 - 44)	500	Runoff/leaching from natural deposits
Turbidity	NTU	2008	0.08 (0.04 - 0.29)	2008	0.10 (0.05 - 0.19)	5	Soil Runoff
Total Dissolved Solids	ppm	2008	370	2007	440 (420 - 450)	1000	Runoff/leaching from natural deposits

Contaminant	Reporting Units	Year Sampled	Distribution System Average (Range)	MCL	Potential Source of Contamination
Odor - Threshold	TON	2008	1.5 (1.0 - 2.1)	3	Naturally occurring organic materials
Color	color units	2008	1 (ND - 1)	15	

Detection of Contaminants without a Drinking Water Standard

Contaminant	Reporting	Year	Treated Water	Year	CAWO Well (Provided 0.34% of Delivered water in 2008)	MCL	Potential Source of Contamination
Alkalinity as CaCO3	ppm	2008	230	2007	330 (320 - 340)	NS	
Calcium	ppm	2008	43	2007	57 (55 - 60)	NS	Runoff/leaching from natural deposits; seawater influence
Hardness as CaCO3	ppm	2008	260	2007	330 (320 - 340)	NS	Generally found in ground and surface water
Magnesium	ppm	2008	37	2007	46 (44 - 47)	NS	
pH		2008	8.30	2007	7.56 (7.44 - 7.66)	NS	Runoff/leaching from natural deposits; seawater influence
Sodium	ppm	2008	34	2007	45 (43 - 46)	NS	