County of San Luis Obispo
Department of Public Works
County Government Center, Room 206
San Luis Obispo, CA 93408
www.slocounty.ca.gov/PW.htm

# **Water Quality Report**





Public Works will be a valued community partner enhancing quality of life for our fellow county residents.



## **Your 2023 Water Quality Report**

The County of San Luis Obispo is pleased to present this annual report describing the quality of your drinking water. Included are details about where your water comes from, what it contains, and how it compares to State standards. 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 potable. Tradúzcalo ó hable con alguien que lo entienda bien.* 

# **Your Water Supply**

The primary source of water for Cayucos is Whale Rock Reservoir. Whale Rock Reservoir has a total capacity of 39,967 acre-feet. The current storage is 39,967 acre-feet which is 100% full (as of February 2023). The Whale Rock Commission manages the reservoir and is 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 to minimize viral contamination from human contact. Water from the reservoir is piped downstream to the Cayucos Water Treatment Plant (WTP) where it is filtered and chlorinated. Before chlorination, a percentage of the water is passed through two granular activated carbon filters (GAC). In addition, Cayucos has a



groundwater well, the Whale Rock Well (CAWO Well). The CAWO well contributed less than 1% of the total water production by CSA 10 in 2023.

A watershed sanitary survey is conducted every five years. The first survey was done by Boyle Engineering in 2001. In March 2021, the most recent watershed sanitary survey was published (please see the link below).

#### **Watershed Sanitary Survey**

http://www.slocounty.ca.gov/Departments/PublicWorks/Services/Watershed-SanitarySurveys.aspx

# **Operations**

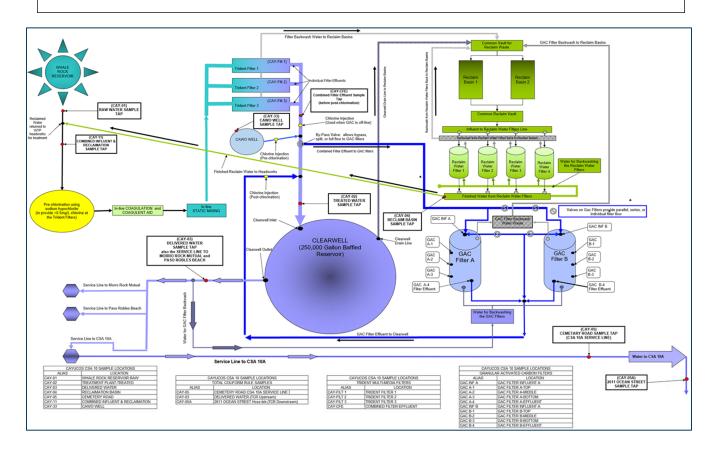
The Cayucos water system is assigned three primary operators who, like all operators who work for the County, are certified by the State Water Resources Control Board Department of Drinking Water (SWRCB-DDW). Our operators are knowledgeable professionals who have many years of experience. They are dedicated to maintaining an excellent water system and providing you with the best quality water possible.

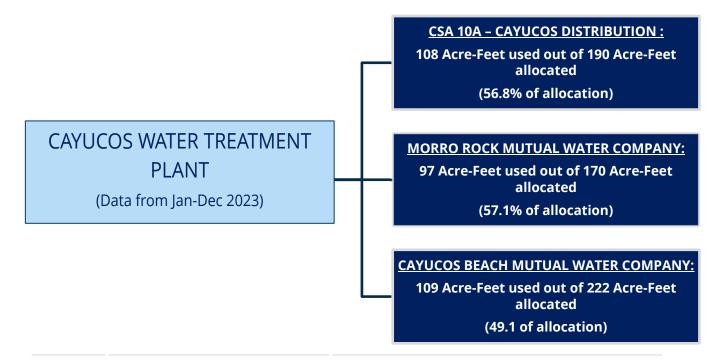
Operators conduct weekly inspections of the well, tanks, and distribution system to ensure a safe and reliable water supply. In addition, the SWRCB-DDW routinely inspects the facilities, operating procedures, and water quality monitoring records to verify compliance with state and federal regulatory requirements.



# **Water Delivery**

#### CAYUCOS WATER TREATMENT PLANT FLOW SCHEMATIC







# **Water Quality**

The following tables are a snapshot of drinking water constituents that were detected in your water in 2023 unless otherwise noted. The State allows us to monitor some substances less than once per year because the concentrations do not change frequently. Some of our data, although representative, may be more than one year old. The presence of these substances detected in water does not necessarily indicate that the water poses a health risk. For questions about this data, please contact the Water Quality Section at (805) 781-5111.

| Regulated Contaminants with Primary MCLs, MRDLs, TTs or RALs |  |  |            |   |                                      |            |   |  |  |  |
|--|--|--|------------|---|--------------------------------------|------------|---|--|--|--|
| Constituent (Unit)   | Where Sampled                                      | Where Sampled MCL , TT, or [MRDL] PHG, [MCG [MRDL] |            | Range Detected                                | Average Detected                     | Violation? | Potential Source of Contamination   |  |  |  |
| Filter Performance   |  |  |            |   |                                      |            |   |  |  |  |
| Turbidity (NTU) <sup>1</sup>                                 | Filters  | TT = 1 NTU   |            | 0.02-0.08                                     | 0.03                                 | No         | Surface water runoff  |  |  |  |
|  |  | TT = 95% of samples<br>≤ 0.3                       |            | 100%  | 100%                                 | No         |   |  |  |  |
| Microbiological  |  |  |            |   |                                      |            |   |  |  |  |
| Total Coliform Bacteria (Present or absent)                  | Delivered  | > 1 positive per<br>month                          | [0]        | ND  | ND                                   | No         | Naturally present in the environment.   |  |  |  |
| Heterotrophic Bacteria<br>(CFU/mL)                           | Delivered  | TT ≤ 500   | N/A        | ND - 25                                       | ND                                   | No         | Naturally present in the environment.   |  |  |  |
| Inorganic  |  |  |            |   |                                      |            |   |  |  |  |
| Aluminum (ppm)   | Treated <sup>2</sup> and<br>Delivered <sup>3</sup> | 1  | 0.6        | ND-0.110 (Treated)<br>0.058-0.090 (Delivered) | 0.061 (Treated)<br>0.079 (Delivered) | No         | Erosion of natural deposits; residue from some surface water treatment processes.   |  |  |  |
| Arsenic (ppb)  | Source⁴ and<br>Treated                             | 10   | 0.004      | 1.9-2.3                                       | 2.1                                  | No         | Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.                               |  |  |  |
| Barium (ppm)   | Source and Treated                                 | 1  | 2          | 0.063-0.070                                   | 0.067                                | No         | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.                                 |  |  |  |
| Boron (ppb)  | Delivered  |  | RAL = 1000 | 110   | 110                                  | No         | Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.                                 |  |  |  |
| Fluoride (ppm)   | Delivered  | 2.0  | 1          | 0.29  | 0.29                                 | No         | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories. |  |  |  |
| Radioactivity  |  |  |            |   |                                      |            |   |  |  |  |
| Gross Alpha Particle Activity (pCi/L)                        | Source<br>(Sampled 2019) <sup>5</sup>              | 15   | N/A        | 3.3 - 3.5                                     | 3.4                                  | No         | Erosion of natural deposits.  |  |  |  |
| Disinfectant Residuals and Disinfe                           | ction Byproducts                                   |  |            |   |                                      |            |   |  |  |  |
| Chlorine (ppm)   | Delivered  | [4.0 as Cl2]                                       | [4 as Cl2] | 1.15-1.58                                     | 1.35                                 | No         | Drinking water disinfectant added for treatment.  |  |  |  |
| Haloacetic Acids (ppb)                                       | Delivered  | LRAA = 60  |            | 2.0-7.6                                       | 4.0                                  | No         | Byproduct of drinking water disinfection.   |  |  |  |
| Total Trihalomethanes (ppb)                                  | Delivered  | LRAA = 80  |            | 5.5-38  | 18.0 max LRAA                        | No         | Byproduct of drinking water disinfection.   |  |  |  |

<sup>&</sup>lt;sup>1</sup> See Turbidity definition under the *Additional Information* section on page 6.

<sup>&</sup>lt;sup>2</sup> "Treated water" water samples collected at Cay WTP right after treatment process before delivered water

<sup>&</sup>lt;sup>3</sup> Delivered Water samples are collected after GAC filter system, chlorination, and water storage tank to meet CT for the plant.

<sup>&</sup>lt;sup>4</sup> "Source" Raw water samples from Whale Rock Reservoir or CAWO well.

<sup>&</sup>lt;sup>5</sup> Next sample event is scheduled for 2028.



# County of San Luis Obispo CSA 10 – Cayucos CCR 2023

The Water Quality Laboratory provides laboratory and technical services to support the beneficial management of water and wastewater for the present and future residents of the County of San Luis Obispo.

| Contaminants with a Secondary Drinking Water Standard (Aesthetics) |                          |                  |                           |   |                                      |  |  |  |  |  |
|--|--------------------------|------------------|---------------------------|---|--------------------------------------|--|--|--|--|--|
| Contaminant (Unit)   | Where<br>Sampled         | MCL or<br>[MRDL] | PHG, (MCLG)<br>or [MRDLG] | Range<br>Detected                           | Average<br>Detected                  | Potential Source of Contamination  |  |  |  |  |
| Aluminum (ppb)   | Treated and<br>Delivered | 200              | N/A                       | ND-110<br>(Treated)<br>58-90<br>(Delivered) | 61<br>(Treated)<br>79<br>(Delivered) | Erosion of natural deposits; residue from some surface water treatment processes |  |  |  |  |
| Color (CU)   | Delivered                | 15               |                           | ND – 2.0                                    | ND                                   | Naturally occurring organic materials  |  |  |  |  |
| Odor – Threshold (TON)   | Delivered                | 3                |                           | ND - 1.4                                    | ND                                   | Naturally occurring organic materials  |  |  |  |  |
| Specific Conductance (μS/cm)                                       | Delivered                | 1600             |                           | 640   | 640                                  | Runoff/leaching from natural deposits  |  |  |  |  |
| Sulfate (ppm)  | Delivered                | 500              |                           | 80  | 80                                   | Runoff/leaching from natural deposits  |  |  |  |  |
| Total Dissolved Solids (ppm)                                       | Delivered                | 1000             |                           | 390   | 390                                  | Runoff/leaching from natural deposits  |  |  |  |  |
| Turbidity (NTU)  | Delivered                | 5                |                           | 0.06-0.24                                   | 0.10                                 | Soil runoff  |  |  |  |  |
| Other Parameters   |                          |                  |                           |   |                                      |  |  |  |  |  |
| Total Alkalinity as CaCO3 (ppm)                                    | Delivered                | NS               |                           | 197   | 197                                  | Runoff/leaching from natural deposit.  |  |  |  |  |
| Calcium (ppm)  | Delivered                | NS               |                           | 50  | 50                                   | Runoff/leaching from natural deposits  |  |  |  |  |
| Total Hardness (ppm)   | Delivered                | NS               |                           | 290   | 290                                  | Generally found in ground and surface water                                      |  |  |  |  |
| Magnesium (ppm)  | Delivered                | NS               |                           | 40  | 46                                   | Runoff/leaching from natural deposits  |  |  |  |  |
| Sodium (ppm)   | Delivered                | NS               |                           | 36  | 36                                   | Runoff/leaching from natural deposits  |  |  |  |  |

Some additional constituents monitored at our source water but did not detect above State reporting limits: 1, 2, 3-trichloropropane, chromium, copper, iron, lead, manganese, MBAS, nitrite, perchlorate, potassium, selenium, silver, VOCs, SOCs, and zinc.



### **KEY TERMS AND ABBREVIATIONS**

**CFU/ml** – Colony Forming Units per milliliter.

**CU** - Color Units.

**DWR** – Department of Water Resources

**LRAA** – Locational Running Annual Average. An average of quarterly samples from a particular monitoring location for one year.

MCL - Maximum Contaminant Level. The highest level of 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.

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 U.S. Environmental Protection Agency.

**mg/L -** Milligrams per Liter.

**mL** - Milliliter.

MRDL - Maximum Residual Disinfectant Level. The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG** – Maximum Residual Disinfectant Level Goal. 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.

**MPN/100mL** - Most Probable Number of organisms in a 100mL sample.

**NA** - Not Analyzed.

**ND** – Not Detected. The contaminant is not detectable at the testing limit.

**NTU –** Nephelometric Turbidity Unit.

**pCi/L** – picocuries per liter (a measure of radioactivity).

PDWS – Primary Drinking Water Standards. MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. PDWS pertains to the following: Filtration Performance, Microbiological Contaminants, Inorganic Contaminants, Radioactive Contaminants and Disinfection Byproducts, Disinfection Residuals, and Disinfection Byproduct Precursors.

**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.

**ppb** – parts per billion, or micrograms per liter (µg/L).

**ppm** – parts per million, or milligrams per liter (mg/L).

Primary MCL – Maximum contaminant level for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.

**RAL** – Regulatory Action Level. The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

Secondary MCLs – Maximum contaminant level for contaminants to protect the taste, odor, or appearance of the drinking water.
Contaminants with secondary MCLs 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 (unit of specific conductance of water).

**μg/L** - Micrograms per Liter.

**USEPA** – United States Environmental Protection Agency



# **Water Quality Section**

The Department of Public Works Water Quality Section provides laboratory and technical support services for most County operated water and wastewater systems. The lab is certified by the State of California's Environmental Laboratory Accreditation Program (ELAP). To remain certified by the State, the lab is required to annually demonstrate capability by analyzing unknown values for each constituent. In addition to analytical work, Water Quality also provides sampling, compliance reporting, watershed monitoring, and technical support services for Public Works systems.

# **Community Participation**

The San Luis Obispo County Board of Supervisors meets two to three times a month. All meetings are held in the Board Chambers located in the new County Government Center, 1055 Monterey Street, San Luis Obispo. The Board holds budget hearings during 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 website at <a href="http://www.slocounty.ca.gov/bos.htm">http://www.slocounty.ca.gov/bos.htm</a>.

The Cayucos Citizens Advisory Council meets the first Wednesday of each month at the Cayucos School Cafeteria and via zoom at 7:00 p.m. The Cayucos Area Water Organization meets the first Monday of every other month (starting in January) at 1660 Cabrillo Avenue, Cayucos at 1:30 p.m.

# **Important Health Information**

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).

# **Drinking Water and Lead**

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water typically comes 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 (1-800-425-4791) or at <a href="http://www.epa.gov/safewater/lead">http://www.epa.gov/safewater/lead</a>.

#### **Additional information**

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 human activity.



# County of San Luis Obispo CSA 10 - Cayucos CCR 2023

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**, 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems.
- **Radioactive contaminants**, that can be naturally-occurring or be the result of oil and gas production and mining activities.
- **Turbidity** is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfection.

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

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).

#### **Additional Information**

USEPA Office of Ground Water and Drinking Water <a href="http://water.epa.gov/drink/index.cfm">http://water.epa.gov/drink/index.cfm</a>

California State Water Resources Control Board (SWRCB)

http://www.waterboards.ca.gov/drinking water/certlic/drinkingwater/publicwatersystems.shtml



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