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

County of SLO CSA23 – Santa Margarita

System Number 4010024

2022

COUNTY OF SAN LUIS OBISPO

Your 2022 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

Your water comes from two groundwater wells located in Santa Margarita, Well #3 and Well #4. The water is cleaned through a natural filtration process as it trickles down through the ground. During this process, water may also pick-up minerals or contaminants found in the soil, either natural or man-made. Groundwater is normally very clean and is simply disinfected with chlorine to help minimize the risk from viral and bacterial contamination. Additional treatment for removing iron, manganese, and arsenic is provided at Well #3 and removes on average of 97 percent of iron from the raw water.

The wells are routinely monitored for contaminants and the results are reported to the State Water Resources Control Board – Division of Drinking Water. The findings are evaluated relative to the California Drinking Water Primary and Secondary Maximum Contaminant Standards. ***All water quality standards were met in 2022.***

A Comparison of Santa Margarita Water Usage (2021-2022)

CSA23 – Santa Margarita Water Statistics (January - December)					
Year	**Annual Consumption (million gallons)**	**Annual Consumption (acre-feet)**	**Average Daily Demand (gallons)**	**Gallons per day per service connection[1]**	**Percent Change from Previous Year**
2021	39.4	121	108,027	214	5.5% Decrease (2020)
2022	37.1	114	101,780	201	5.6% Decrease (2021)

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 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**, 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 application, 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 cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfections.

In order 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.

[1] According to the Environmental Protection Agency (EPA), "the average American Family uses more than 300 gallons of water per day at home."

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).

Santa Margarita News

All water quality results, above established minimum detection levels, are published in the annual Consumer Confidence Report (CCR) produced by the County. Santa Margarita's CCR is available at:

https://slocounty.ca.gov/ccr/margarita

More information about your water quality can also be found at the website:

https://sdwis.waterboards.ca.gov/PDWW/index.jsp
Enter CA4010024 for the Water System Number or use **SLO CWWD NO. 23 – SANTA MARGAR** for the Water System Name. Information provided at the site includes Water System Details, Water System Facilities, Monitoring Schedules, Monitoring Results, Lead and Copper Sample Summary Results, Violations/Enforcement Actions, and Site Visits.

WATER STATUS: Although the water levels are "Normal", the shallow basin below Santa Margarita is the only water source for the community and customers, so continue to use water wisely. For more information and tips on how to conserve water, please visit https://www.slocounty.ca.gov/Departments/Public-Works/Services/Programs-Outreach/Water-Conservation.aspx

Community Participation

The Santa Margarita CSA 23 Advisory Committee meets the first Thursday of every month at 7:00 p.m. in the Community Hall on the corner of I and Murphy Streets. The public is welcome to participate. Please email smcsa23@gmail.com for more information.

The County of San Luis Obispo Board of Supervisors meets bi-monthly on Tuesdays at 9:00 a.m. in the Board Chambers located in the new County Government Center, 1055 Monterey Street, San Luis Obispo. The Board holds budget hearings during the month of June. Board of Supervisors meeting calendar and agendas are posted in some County libraries, the County Government Center, and online at http://www.slocounty.ca.gov/bos.htm. On August 13, 2019, a rate increase was passed to provide additional funding for Operations and Maintenance, building up of reserves, and capital improvement projects. Specific information on water rates and fees for CSA 23 can be found here www.slocounty.ca.gov/pw/csa23.

2022 Water Quality Data

The following tables are a snapshot of drinking water constituents that were detected in your water in 2022, unless otherwise noted. The State allows us to monitor for 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.

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

Contaminant (Unit)	Where Sampled	Year Sampled	MCL or [MRDL]	PHG, (MCLG) or [MRDLG]	Range Detected	Average Detected	Potential Source of Contamination
Regulated Contaminants with Primary MCLs, MRDLs, TTs or RALs							
Turbidity (NTU)[2]	Well 4	2022	TT = 1NTU	-----	0.03	0.03	Surface water runoff.
		2022	TT = 95% of samples ≤ 0.3 NTU	-----	-----	100.0%	
Microbiological							
Total Coliform Bacteria (Present or Absent)	Distribution	2022	> 1 positive sample per month	0	Absent	Absent	Naturally present in the environment.
E. *Coli* Bacteria (Present or Absent)	Distribution	2022	> 1 positive sample per month	0	Absent	Absent	Naturally present in the environment.

[2] See Turbidity definition under the *Additional Information* section on page 2.

Contaminant (Unit)	Where Sampled	Year Sampled	MCL or [MRDL]	PHG, (MCLG) or [MRDLG]	Range Detected	Average Detected	Potential Source of Contamination
Heterotrophic Bacteria (CFU/mL)	Distribution	2022	TT = < 500	-----	ND -140	2	Naturally present in the environment.
Inorganic							
Arsenic (ppb)	Source[3]	2022	10	0.004	3.2-5.0 (Raw) 3.1-5.5 (Treated)	4.2 3.8	Erosion of natural deposits.
Fluoride (ppm)	Source	2022	2	1	ND-0.12	ND	Erosion of natural deposits.
Nitrate as N (ppm)	Source	2022	10	10	ND-0.49	0.24	From fertilizer use, septic tanks and sewage; erosion of natural deposits.
Disinfectant Residuals and Disinfection Byproducts							
Chlorine (ppm)	Distribution	2022	[4.0 as Cl_2]	[4 as Cl_2]	0.90-2.17	1.56	Drinking water disinfectant added for treatment.
Haloacetic Acids (ppb)	Delivered	2022	-----	LRAA = 60	ND	ND	Byproduct of drinking water disinfection.
Total Trihalomethanes (ppb)	Delivered	2022	-----	LRAA = 80	2.3	2.3	Byproduct of drinking water disinfection.
Corrosion Control Monitoring[4]							
Ortho-phosphate (ppm)	Distribution	2022	Optimal Range (average 1.5 to 2.2)	-----	1.40-2.20	1.73	Byproduct of drinking water treatment.
pH	Distribution	2022	Optimal Range (average 7.4 to 8.0)	-----	7.07-7.90	7.60	From natural deposits; seawater influence.
Radioactivity							
Gross Alpha Particle Activity (pCi/L)	Source	2014[5]	15	N/A	1.24 – 3.29	2	Erosion of natural deposits.
Contaminants with a Secondary Drinking Water Standard (Aesthetics)							
Color (CU)	Distribution	2022	15	-----	ND - 1	ND	Naturally occurring organic materials.
Chloride (ppm)	Source	2022	500	-----	14-18	16	From natural deposits.
Iron (ppm)	Source	2022	300	-----	ND-240 (Raw) ND (Treated)	106 ND	Leaching from natural deposits; industrial wastes.
Odor – Threshold (TON)	Distribution	2022	3	-----	ND – 3.0	ND	Naturally occurring organic materials.
Manganese (µg/L)	Source	2022	50	-----	ND (Raw) ND (Treated)	ND ND	Erosion of natural deposits.
Specific Conductance (µS/cm)	Source	2022	1600	-----	590-620	605	From natural deposits.
Sulfate (ppm)	Source	2022	500	-----	15-54	34	From natural deposits.
Total Dissolved Solids (ppm)	Source	2022	1000	-----	330-350	340	From natural deposits.
Turbidity (NTU)	Distribution	2022	5	-----	0.05-0.30	0.11	Soil runoff.
Unregulated Contaminants							
Total Alkalinity as $CaCO_3$ (ppm)	Source	2022	NS	-----	235-249	242	From natural deposits.
Calcium (ppm)	Source	2022	NS	-----	34-51	42	From natural deposits.
Total Hardness (ppm)	Source	2022	NS	-----	160-290	225	From natural deposits.
Magnesium (ppm)	Source	2022	NS	-----	17-38	28	From natural deposits.
Sodium (ppm)	Source	2022	NS	-----	28-76	52	From natural deposits.

Contaminant (Unit)	Number of Samples	Range	90th Percentile	Regulatory Action Level	PHG, (MCLG) or [MRDLG]	# of sites exceeding RAL	Potential Source of Contamination
Lead and Copper Monitoring at the Consumers' Tap (Sampled in 2020)							
Lead (ppb)	11	ND-1.3	1.3	15	0.2	None	Corrosion of household plumbing.
Copper (ppb)	11	ND-330	310	1300	300	None	Corrosion of household plumbing.
Lead and Copper Monitoring at the Santa Margarita Elementary (Sampled in 2018)							
Lead (ppb)	10	ND-2.6	<5.0	15	0.2	None	Corrosion of household plumbing.
Copper (ppb)	10	6.9-1100	930	1300	300	None	Corrosion of household plumbing.

Some additional constituents monitored at our source water but did not detect above State reporting limits: chromium, copper, lead, MBAS, nitrite, perchlorate, potassium, SACR-C, selenium, silver, VOC, 1,2,3-TCP, and zinc.

3 Source water is the combination of Well 03 and Well 04 raw data.

4 Well 04 is treated for corrosion control to comply with the Lead and Copper Rule. Treatment for corrosion control includes injecting a blended phosphate solution for pH adjustment. The system is required to maintain a phosphate level of 1.5 – 2.2 mg/L and a pH of 7.4 – 8.0.

5 Next sample event is scheduled for 2023.

KEY TERMS AND ABBREVIATIONS

AL – Action Levels.

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 a period of one year.

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. 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 a disinfectant allowed in drinking water. There is convincing evidence that 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 100-mL sample.

NA – Not Analyzed.

ND – Not Detected. Contaminant is not detectable at 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 pertain 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.

Drinking Water and Health Risks

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).

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system.

The County conducts monthly analysis of arsenic in both the source water and treated water before delivery. Source water arsenic levels ranged from Not Detected to 5.0 ppb with an average arsenic level of 4.2 ppb during the year. Arsenic levels of treated water delivered ranged from Not Detected to 5.5 ppb with an average arsenic level of 3.8 ppb, which is below the maximum contaminant level for arsenic, which is 10 ppb.

While your drinking water meets the Federal and State standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effect of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

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 http://www.epa.gov/safewater/lead.

Contact Information

USEPA Office of Ground Water and Drinking Water
http://water.epa.gov/drink/index.cfm

California State Water Resources Control Board (SWRCB)
http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml

Request the Report in a Different Language

This report contains important information about your drinking water.
Please contact the Department of Public Works at (805) 781-1406 for assistance in Spanish.