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





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

Your 2019 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 manmade. 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 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 2019.*

	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					
2018	49.6	152	135,900	270	NA					
2019	45.7	140	125,200	248	8.0% Decrease					

A Comparison of Santa Margarita Water Usage (2018-2019)

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 the 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.

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).

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

Santa Margarita News

All water quality results, above established minimum detection levels, are published in annual Consumer Confidence Reports (CCRs) 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.

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 attend.**

The San Luis Obispo County Board of Supervisors meet two to three times a month, please check their website for exact dates and time. 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 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 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.

2019 Water Quality Data

The following tables are a snapshot of drinking water constituents that were detected in your water in 2018, 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 Laboratory at (805) 781-5111.

Contaminant (Unit)	Where Sampled	Year Sampled	MCL or [MRDL]	PHG, (MCLG) or [MRDLG]	Range Detected	Average Detected	Potential Source of Contamination
Regulated Contaminants w	v ith Primary MCLs	, MRDLs, TT	s or RALs				
Turbidity (NTU) ²	Well 4	2019	TT = 1NTU		0.03-0.11	0.04	Surface water runoff.
		2019	TT = 95% of samples ≤ 0.3 NTU			100.0%	-
		1	Mici	robiological			
Total Coliform Bacteria (Present or Absent)	Distribution	2019	> 1 positive sample per month	0	ND - Present ³	ND	Naturally present in the environment.
E. Coli Bacteria (Present or Absent)	Distribution	2019	> 1 positive sample per month	0	ND	ND	Naturally present in the environment.
Heterotrophic Bacteria (CFU/mL)	Distribution	2019	TT = < 500		ND - 170	2.4	Naturally present in the environment.
			li li	norganic			
Arsenic (ppb)	Source	2019	10	0.004	ND - 5.8	4.63	Erosion of natural deposits.
Fluoride (ppm)	Source	2017	2	1	0.17 - 0.20	0.190	Erosion of natural deposits.
Nitrate as N (ppm)	Source	2019	10	10	ND-3.8	1.9	From fertilizer use, septic tanks and sewage; erosion of natural deposits.

The Utilities Division Water Quality Laboratory 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.

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

³ One positive Total Coliform result in January 2019 (sample tested negative for E. Coli). See *Drinking Water and Health Risk* section for additional information on page 6.

Contaminant (Unit)	Where	Year	MCL or [MRDL]	PHG, (MCLG) or	Range Detected	Average	Potential Source of
	Sampled	Sampled		[MRDLG]		Detected	Contamination
Disinfectant Residuals and Dis	infection Bypro	oducts			-		
Chlorine (ppm)	Distribution	2019	[4.0 as Cl ₂]	[4 as Cl ₂]	1.14-2.30	1.64	Drinking water disinfectant added for treatment.
Haloacetic Acids (ppb)	Delivered	2019		LRAA = 60	3.9	3.9	Byproduct of drinking water disinfection.
Total Trihalomethanes (ppb)	Delivered	2019		LRAA = 80	<1.0	<1.0 max LRAA	Byproduct of drinking water disinfection.
Corrosion Control Monitoring	4	I			1		
Ortho-phosphate (ppm)	Distribution	2019	Optimal Range (average 1.5 to 2.2)		1.80-2.20	2.1	Byproduct of drinking water treatment.
рН	Distribution	2019	Optimal Range (average 7.4 to 8.0)		7.26-8.24	7.81	From natural deposits; seawater influence.
Radioactivity						•	
Gross Alpha Particle Activity (pCi/L)	Source	2014	15	N/A	1.24 - 3.29	2	Erosion of natural deposits.
Contaminants with a Seconda	ry Drinking Wa	ter Standard	(Aesthetics)			•	
Color (CU)	Distribution	2019	15		ND - 2	ND	Naturally occurring organic materials.
Chloride (ppm)	Source	2019	500		19-23	21	From natural deposits.
Iron (ppb)	Source	2019	300		79-1100 (Raw) ND-8.1 (Treated)	180 ND	Leaching from natural deposits; industrial wastes.
Odor – Threshold (TON)	Distribution	2019	3		ND - 3.5 ⁵	1.0	Naturally occurring organic materials.
Manganese (ppb)	Source	2019	50		ND-12 (Raw) ND (Treated)	ND	Erosion of natural deposits.
Specific Conductance (µS/cm)	Source	2019	1600		580 - 670	620	From natural deposits.
Sulfate (ppm)	Source	2019	500		15-65	40	From natural deposits.
Total Dissolved Solids (ppm)	Source	2019	1000		340-350	340	From natural deposits.
Turbidity (NTU)	Distribution	2019	5		0.03-0.55	0.11	Soil runoff.
Unregulated Contaminants							
Total Alkalinity as CaCO₃ (ppm)	Source	2019	NS		244-269	256	From natural deposits.
Calcium (ppm)	Source	2019	NS		32-54	43	From natural deposits.
Total Hardness (ppm)	Source	2019	NS		150-160	155	From natural deposits.
Magnesium (ppm)	Source	2019	NS		16-42	29	From natural deposits.
Sodium (ppm)	Source	2019	NS		32-81	56.5	From natural deposits.
Unregulated Contaminants for	r which Monito	ring is Requ	ired				
1,2,3-TCP (ppb)	Source and Distribution	2018	NS	0.0007	<0.005	<0.005	Manmade chemical found at industrial/hazardous waste sites.

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 2017)										
Lead (ppb)	14	ND-3.0	<5.0	15	0.2	None	Corrosion of household plumbing.			
Copper (ppb)	16	ND-420	390	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 and zinc.

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

⁴ Well 04 is treated for corrosion control in order 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 Due to Well 03 depth odor levels could exceed normal range. Odors are controlled with the treatment of water through filters and chlorination.

KEY TERMS AND ABBREVIATIONS

AL – Action Levels.

CFU/ml – Colony Forming Units per milliliter.

CU – Color Units.

DWR – Department of Water Resources

Level 1 Assessment- is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

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 100mL 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

Drinking Water and Health Risks

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment to identify problems and to correct any problems that were found during this assessment. During the past year we were required to conduct an assessment to identify problems and to correct any problems that were found during the assessment. During the past year, we were required to conduct one Level 1 Assessment. There was no corrective action required after the completion of the assessment.

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 5.8 ppb with an average arsenic level of 4.6 ppb during the year. Arsenic levels of treated water delivered ranged from Not Detected to 5.6 ppb with an average arsenic level of 4.0 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 805-781-4075 for assistance in Spanish