

2016 Consumer Confidence Report



Water System Name: Santa Lucia Preserve Report Date: July 1, 2017

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2016 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: Ground water wells in the Santa Lucia Preserve watersheds

Name & general location of source(s): (R1, R42, S1, S3,T3, T20, T21, T29, N4, N5, N6, N7, N8, N10, N12, N21, N22, N23, N24, N25, N27,N28, N29, N30,N31, N41 N51, N54, N52, N57, N60 and N62)

Drinking Water Source Assessment information: Reports are kept at the SLP Water Office - 82 Rancho San Carlos Rd. Reports Date from 2000 to 2016 as wells became permitted.

Time and place of regularly scheduled board meetings for public participation: Santa Lucia Community Services District board meetings are Quarterly. Typically on the third Monday at the beginning of each quarter at the New Corporation Yard Building – A, Conference Room

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TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): 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.

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

Treatment Technique (TT): A required process intended to

Maximum Contaminant Level Goal (MCLG): 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 (USEPA).

Public Health Goal (PHG): 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.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

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

reduce the level of a contaminant in drinking water.

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

Variations and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A 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.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

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

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

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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.

In order to ensure that tap water is safe to drink, the 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.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water

quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(In a mo.) 0	0	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year) 0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(from 4/1/16-12/31/16) 0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	9/25/14	5	4	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/25/14	5	0.1	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2014-2106	64.83	17-180	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2014 - 2016	147.36	2-781	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic (ppm)	2014-2016	1.47	ND-6	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Cadmium (ppb)	2014-2016	3.2	ND – 41*	5	0.04	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Chromium Total (ppb)	2014-2016	7.47	ND-36	50	(100)	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2014-2016	0.81	ND-1.7	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Nitrate as N (ppm)	2016	0.7	ND-1.7	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite as N (ppm)	2014-2016	0.032	ND-0.5	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Aluminum (ppm)	2014-2016	0.016	ND-0.087	1	.6	Erosion of natural deposits; residue from some surface water treatment processes
Barium (ppm)	2014-2016	0.051	ND-0.253	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Nickel (ppb)	2014-2016	3.07	ND-67	100	12	Erosion of natural deposits; discharge from metal factories
Selenium (ppb)	2014-2016	0.161	ND-3	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Chlorine (ppm)	2014-2016	0.493	ND-1.67	4	3	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose and stomach discomfort.
TTHMs (Total Trihalomethanes) (ppb)	2014	67.2	N/A	80	N/A	Some people who drink water containing trihalomethanes in excess of MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Haloacetic Acids (ppb)	2014	31	N/A	60	N/A	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Gross Alpha Particle Activity (pCi/L)	2008-2016	1.27	ND-2.39	15	0	Erosion of natural deposits

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	2014-2016	21.4	12-44	500	N/A	Runoff/leaching from natural deposits; seawater influence
Copper (ppm)	2014-2016	0.004	ND-0.007	1	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Specific Conductance (uS/cm)	2014-2016	535.7	185-1330	1600	N/A	Substances that form ions when in water; seawater influence
Total Dissolved Solids (TDS) (ppm)	2014-2016	335	126-1040	1000	N/A	Runoff/leaching from natural deposits
Sulfate (ppm)	2014-2016	56.1	24-530	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Aluminum (ppb)	2014-2016	16.3	ND-87	200	N/A	Erosion of natural deposits; residual from some surface water treatment processes
Manganese (ppb)	2014-2016	2	ND-77*	50	N/A	Leaching from natural deposits
Iron (ppb)	2016	104.32	ND-1115*	300	N/A	Leaching from natural deposits
Odor	2014-2016	2.03	1-4*	3	N/A	Naturally-occurring organic materials

Zinc (ppm)	2016	0.076	ND-1.052	5	N/A	Runoff/leaching from natural deposits;
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Additional General Information on Drinking Water

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. 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).

Lead-Specific Language for Community Water Systems: 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 Santa Lucia Preserve Water System 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. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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 (1-800-426-4701) or at <http://www.epa.gov/lead>.

* Cadmium – 41, 34, 19, 11, 9, 7 ug/L, Three wells over the MCL from raw water samples. *Some people who drink water containing cadmium in excess of the MCL over many years may experience kidney damage.*

(a) * Manganese - 77 ug/L, * Iron – 1115 ug/L, 310 ug/L, over the MCL from raw water sampling on 2/8/2016. *There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.*

(b) * Odor over the MCL from raw water sampling on 5/10/16. *There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetics.*

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 effects 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.

**Summary Information for Violation of a MCL, MRDL, AL, TT,
or Monitoring and Reporting Requirement**

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
Monthly Bacteriological Monitoring and Reporting Violation	Routine bacteriological sampling was not done during the month of March 2016	1 month	<p>Sampling was completed in April. Results showed no detections for total coliform or E. coli bacteria.</p> <p>Other bacteriological sampling was done in March as repeats for previous site sampling and results were Non Detect for Total and E.coli bacteria</p>	<p>Coliform are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-- harmful, bacteria may be present. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some other elderly, and people with severely compromised immune systems.</p>