

PUBLISHED IN 2024



CITY OF SANTA PAULA

CONSUMER CONFIDENCE REPORT 2023



DEFINITIONS AND ABBREVIATIONS

The data tables contain scientific terms and units of measure, some of which may require explanation.

90th %ile:

The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

AL (Regulatory Action Level):

The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

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.

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 (SMCLs) 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. EPA.

mg/L:

Milligrams per liter or one part per million (ppm).

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.

NA:

Not applicable.

ND (Non detect):

Indicates when a substance is not detectable at the laboratory analysis testing limits.

NS:

No standard

NTU (Nephelometric Turbidity Units):

Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter):

A measure of radiation.

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 EPA.

SDWS (Secondary Drinking Water Standards):

MCL's for the contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

TT (Treatment Technique):

A required process intended to reduce the level of a contaminant in drinking water.

ug/L:

Micrograms per liter or one part per billion (ppb).

umhos/cm:

Micro mhos per centimeter.

µS/cm (microsiemens per centimeter):

A unit expressing the amount of electrical conductivity of a solution.

Primary Drinking Water Standards

Chemical or Constituents	Years Sampled	Average Level Detected	Range Low - High	MCL [MRDL]	PHG (MCLG) [MRDLG]	Violation	Typical Source	Health Effects Language
Arsenic (ug/L)	2020	2	NA	10	0.004	No	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes.	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems and may have an increased risk of getting cancer.
Fluoride (mg/L)	2023	0.4	0.4 - 0.5	2	1	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.	Some people who drink water containing fluoride in excess of the federal MCL over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL may get mottled teeth.
Nitrate as N (mg/L)	2023	3.4	1.0 - 4.8	10	10	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.
Nitrate + Nitrite as N (mg/L)	2023	2.6	1.0 - 4.7	10	10	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrite in excess of the MCL may quickly become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blueness of the skin.
Selenium (ug/L)	2023	11	ND - 38	50	30	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive).	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years may experience hair or fingernail losses, numbness in fingers or toes, or circulation system problems.

Secondary Drinking Water Standards

Chemical or Constituents	Years Sampled	Average Level Detected	Range Low - High	MCL	PHG (MCLG)	Typical Source	Health Effects Language
Chloride (mg/L)	2023	48	45 - 53	500	NA	Runoff/leaching from natural deposits; seawater influence.	There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetic concerns. MCL violation is based on the average of four quarterly samples exceeding an MCL.
Color (Units)	2020	ND	NA	15	NA	Naturally-occurring organic materials.	Same as above.
Specific Conductance (umhos/cm)	2023	1364	1210 - 1480	1600	NA	Substances that form ions when in water; seawater influence.	Same as above.
Sulfate (mg/L)	2023	420	351 - 478	500	NA	Runoff/leaching from natural deposits; industrial wastes.	Same as above.
Total Dissolved Solids (mg/L)	2023	1038	890 - 1130	1000	NA	Runoff/leaching from natural deposits.	The TDS or Total Dissolved Solids in your water was found at levels that exceed the secondary MCL. The TDS MCLs was set to protect you against unpleasant aesthetic affects such as color, taste or hardness. <u>Violating this MCL does not pose a risk to public health.</u>
Turbidity (NTU)	2023	0.11	ND - 0.55	5	NA	Soil runoff.	Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
Zinc (mg/L)	2023	0.01	ND - 0.03	5	NA	Runoff/leaching from natural deposits.	There are no PHGs, MCLGs, or mandatory standard health effects language for these constituents because secondary MCLs are set on the basis of aesthetic concerns. MCL violation is based on the average of four quarterly samples exceeding an MCL.
Iron (ug/L)	2022-2023	ND	NA	300	NA	Leaching from natural deposits, Industrial wastes.	Iron was found at raw water levels that exceed the secondary MCL. The Iron MCL was set to protect you against unpleasant aesthetic affects such as color, taste, odor and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. Violating this MCL does not pose a risk to public health.
Manganese (ug/L)	2022-2023	1	ND - 20	50	NA	Leaching from natural deposits.	Manganese was found at raw water levels that exceed the secondary MCL. The Manganese MCL was set to protect you against unpleasant aesthetic affects such as color, taste, odor and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. Violating this MCL does not pose a risk to public health.

Regulated Contaminants with no MCL's

Chemical or Constituents	Years Sampled	Average Level Detected	Range Low - High	Notification Level	PHG/ MCL (MCLG)	Typical Source
Aggressiveness Index	2023	12.5	12.3 - 12.6	NA	NA	NA
Alkalinity (mg/L)	2023	254	230 - 290	NA	NA	NA
Boron (mg/L)	2023	0.5	0.4 - 0.6	1	NA	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Calcium (mg/L)	2023	152	128-176	NA	NA	NA
Hardness (mg/L)	2023	551	459-628	NA	NA	Sum of polyvalent cations present in the water, generally magnesium and calcium, that are usually naturally occurring.
Langelier Index	2023	0.5	0.4 - 0.6	NA	NA	NA
Magnesium (mg/L)	2023	42	34 - 47	NA	NA	NA
pH (units)	2023	7.47	7.3 - 7.62	NA	NA	NA
Sodium (mg/L)	2023	91	87 - 92	NA	NA	Salt present in the water and is generally naturally occurring.
Vanadium (ug/L)	2023	1	ND - 2	50	NA	Vanadium exposures resulted in developmental and reproductive effects in rats.

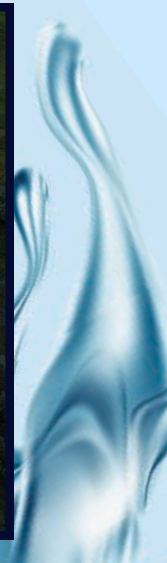


Microbial Contaminants

Chemical or Constituents	Number of Samples Collected	Average Level Detected	Range Low - High	MCL	PHG (MCLG)	Violation	Typical Source	Health Effects Language
Total Coliform Bacteria	571	0	0	State Total Coliform Rule states that violation of the MCL for systems that collect 40 or more samples/month is if more than 5% of their monthly samples are coliform positive.	(0)	No	Naturally present in the environment.	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful bacteria may be present. Coliforms that are found in more samples than allowed would be a warning of potential problems.
Fecal Coliform and E. Coli	571	0	0	State Total Coliform Rule states that violation of the MCL is if a routine and repeat sample are total coliform positive and if one of these samples are also fecal coliform or E. Coli positive.	0	No	Human and animal fecal waste.	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 of the elderly, and people with severely compromised immune systems.

Lead and Copper Monitoring from 2022

Chemical or Constituents	Number of Samples Collected	Level Detected 90th %ile	Number of Sites Exceeding AL	AL	PHG	Violation	Typical Source	Health Effects Language
Copper (mg/L)	34	0.24	0	1.3	0.3	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Lead (mg/L)	34	ND	0	0.015	0	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers, erosion of natural deposits.	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 City of Santa Paula 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 or at: http://www.epa.gov/lead .



Disinfection/Disinfectant Byproduct Rule

Chemical or Constituents	Years Sampled	Average Level Detected	Range Low - High	MCL (MRDL)	PHG (MCLG)	Violation	Typical Source	Health Effects Language
Total Trihalomethanes (TTHMs) (ug/L)	2023	15	12.0 - 15.0	80	NA	No	By-product of drinking water disinfection.	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
Haloacetic Acids (HAA5) (ug/L)	2023	ND	ND - ND	60	0	No	By-product of drinking water disinfection.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Radioactive Contaminants

Chemical or Constituents	Years Sampled	Average Level Detected	Range Low - High	MCL [MRDL]	PHG (MCLG) [MRDLG]	Violation	Typical Source	Health Effects Language
Gross Alpha (pCi/L)	2016 - 2020	5.68	3.75 - 8.96	15	(0)	No	Erosion of natural deposits.	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium (pCi/L)	2016 - 2020	3.99	3.55 - 4.61	20	.43	No	Erosion of natural deposits.	Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.

2023 Consumer Confidence Report

Water System Name: Limoneira #1

Report Date: 6-10-2024

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 to December 31, 2023 and may include earlier monitoring data.

Type of water source(s) in use: Purchased water from Santa Paula water system

Name & general location of source(s): City of Santa Paula

Drinking Water Source Assessment information: Available from Santa Paula Water System

Time and place of regularly scheduled board meetings for public participation: None

For more information, contact: Rosie Castillo

Phone: (805) 525-5541 ext. 1038

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.

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 (U.S. EPA).

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.

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 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.

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) 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 byproducts 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 U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. 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.

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 month) 0	0	1 positive monthly sample ^(a)	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)	(In the year) 0	0	(b)	0	Human and animal fecal waste

(a) Two or more positive monthly samples is a violation of the MCL

(b) 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	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	6/18/2021	10	0.005	0	15	0.2	N/A	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/18/2021	10	0.05	0	1.3	0.3	N/A	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)	Results from water provider	91	87-92	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	Results from water provider	551	459-628	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
TTHM (ppb)	8/9/2023	15	1-15	80	N/A	Byproduct of drinking water disinfection
HAA5 (ppb)	8/9/2023	ND	1-8	60	N/A	Byproduct of drinking water disinfection
Chlorine Residual (ppm)	monthly	0.74	0.66 – 0.90	4.0	4.0	Drinking water disinfection added during treatment

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

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids (ppm)	Results from water provider	1038	890-1130	1000	N/A	Runoff/leaching from natural deposits

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language

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 U.S. EPA'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. U.S. EPA/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: 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. Limoneira Company 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.