2023 Consumer Confidence Report

Water System Name: LASSEN COUNTY WATER DISTRICT #1 Report Date: March 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 - December 31, 2023.

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

Type of water source(s) in use: According to SWRCB records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

Your water comes from 2 source(s): WELL 01 and WELL 02

Opportunities for public participation in decisions that affect drinking water quality: Regularly-scheduled water board or city/county council meetings are held at Water District Office every second Tuesday of the month at 5:00 pm. *If your meetings are not regularly-scheduled, tell customers how to get information when meetings are announced.

For more information about this report, or any questions relating to your drinking water, please call (530)278-6476 and ask for Bryan Hutchinson or email LCWD@usa.com.

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): 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 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 (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 the contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs 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.

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.

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

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

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

NTU: Nephelometric Turbidity Units

umhos/cm: micro mhos per centimeter

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 if 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 Resource Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 6 and 7 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 Water 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 MCL, AL or MRDL is highlighted. 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 Sources of Contaminant**
Total Coliform Bacteria	9/year (2023)	1	no more than 1 positive monthly sample	0	Naturally present in the environment.

Table 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in last sample set)	**Sample Date**	**No. of Samples**	**90th percentile level detected**	**No. Sites Exceeding AL**	**AL**	**PHG**	**Typical Sources of Contaminant**
Copper (mg/L)	(2022)	5	0.11	0	1.3	.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**	**Average Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Sources of Contaminant**
Sodium (mg/L)	(2018)	30	29 - 30	none	none	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	(2018)	100	99.3 - 101	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**	**Average Level Detected**	**Range of Detections**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Sources of Contaminant**
Arsenic (ug/L)	(2018)	ND	ND - 3	10	0.004	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Fluoride (mg/L)	(2018)	0.2	n/a	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.

Table 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	**Sample Date**	**Average Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Sources of Contaminant**
Chloride (mg/L)	(2018)	10	n/a	500	n/a	Runoff/leaching from natural deposits; seawater influence
Color (Units)	(2015)	20	5 - 35	15	n/a	Naturally-occurring organic materials
Iron (ug/L)	(2023)	1498	ND - 2730	300	n/a	Leaching from natural deposits; Industrial wastes
Manganese (ug/L)	(2023)	362	ND - 650	50	n/a	Leaching from natural deposits
Odor Threshold at 60 °C (TON)	(2015)	1	n/a	3	n/a	Naturally-occurring organic materials.
Specific Conductance (umhos/cm)	(2018)	353	341 - 364	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	(2018)	10.5	1.7 - 19.3	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	(2018)	205	190 - 220	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	(2015)	2.2	1.5 - 2.8	5	n/a	Soil runoff
Zinc (mg/L)	(2018)	0.14	0.09 - 0.18	5	n/a	Runoff/leaching from natural deposits

Table 6 - DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	**Sample Date**	**Average Level Detected**	**Range of Detections**	**Notification Level**	**Typical Sources of Contaminant**
Manganese (ug/L)	(2023)	362	ND - 650	n/a	n/a

Table 7 - ADDITIONAL DETECTIONS					
Chemical or Constituent (and reporting units)	**Sample Date**	**Average Level Detected**	**Range of Detections**	**Notification Level**	**Typical Sources of Contaminant**
Calcium (mg/L)	(2018)	25	20 - 29	n/a	n/a
Magnesium (mg/L)	(2018)	10	7 - 12	n/a	n/a
pH (units)	(2018)	7.5	n/a	n/a	n/a
Alkalinity (mg/L)	(2018)	160	n/a	n/a	n/a
Aggressiveness Index	(2018)	11.5	11.4 - 11.6	n/a	n/a
Langelier Index	(2018)	-0.4	-0.4 - -0.3	n/a	n/a

Additional General Information on Drinking Water

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts if 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 the service lines and home plumbing. *Lassen County Water District #1* 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.

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**
Total Coliform Bacteria				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(s) to identify problems and to correct any problems that were found during these assessments.
Color				Color was found at levels that exceed the secondary MCL. The color MCL was set to protect you against unpleasant aesthetic affects due to color. Violating this MCL does not pose a risk to public health.

Iron				Iron was found at 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				Manganese was found at 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.

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Drinking Water Assessment Information

Assessment Information

A Drinking Water Source Assessment was conducted for the WELL01 and WELL 02 of the LASSEN COUNTY WATER DISTRICT #1 water system in April, 2002.

WELL 01 - is considered most vulnerable to the following activities associated with contaminants detected in the water supply:
Sewer collection systems
Wells - Agricultural/ Irrigation
Lagoons/liquid wastes
Wastewater treatment plants
Crops, nonirrigated [e.g., Christmas trees, grains, grass seeds, hay,
Other Animal operations
Wells - monitoring, test holes
is considered most vulnerable to the following activities not associated with any detected contaminants:
Chemical/petroleum processing/storage
Historic gas stations
Underground storage tanks - Confirmed leaking tanks

WELL 02 - is considered most vulnerable to the following activities associated with contaminants detected in the water supply:
Sewer collection systems
Wells - Agricultural/ Irrigation
Lagoons/liquid wastes
Wastewater treatment plants
Crops, nonirrigated [e.g., Christmas trees, grains, grass seeds, hay,
Other Animal operations
Wells - monitoring, test holes
is considered most vulnerable to the following activities not associated with any detected contaminants:
Chemical/petroleum processing/storage
Historic gas stations
Underground storage tanks - Confirmed leaking tanks

Discussion of Vulnerability

Due to the detection of Arsenic, Well 01 is considered vulnerable to activities that may have contributed to or caused the release of Arsenic. In particular, Arsenic is believed to be associated with runoff from orchards, glass and electronics production wastes, and erosion of natural deposits. Arsenic was detected for Well 01 before November 1995 with results reaching up to 11.0 Ug/L compared to the MCL of 50.0 Ug/L; Arsenic was detected again on February 1999 with results reaching up to 3.0 Ug/L. This chemical has been non-detected since February 1999.
Due to the detection of Nitrate (as N03) detected in the month of December 1998, and Nitrate + Nitrite (as N) detected in the month of December 1997, Well 01 is considered most vulnerable to activities that may have contributed to or caused the release of Nitrates. Nitrate and Nitrite are associated with runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. Nitrate (as NO3) has been non-detected since January 2000. Nitrate + Nitrite (as N) has been non-detected since December 1997.

Due to the detection of Nitrate (as NO3) and Nitrate + Nitrite (as N), Well 02 is considered vulnerable to activities that may have contributed to or caused the release of Nitrate (as NO3) and Nitrate + Nitrite (as N). In particular, Nitrate (as NO3) and Nitrate + Nitrite (as N) is believed to be associated with runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits. Nitrate (as NO3) and Nitrate + Nitrite (as N) was detected for Well 02 before December 1995 with results reaching up to 1,403 Ug/L compared to the MCL of 10,000 Ug/L; This chemical was detected various times after December 1995 up until January 2000 after which it has been non-detected.

Acquiring Information

A copy of the complete assessment may be viewed at:
SWRCB-Division of Drinking Water - District 02 Lassen
364 Knollcrest Dr Suite 101
Redding, CA 96002

You may request a summary of the assessment be sent to you by contacting:
Steve Watson
Steve.Watson@waterboards.ca.gov
(530) 224-4800