2023 Consumer Confidence Report

Water System Information

Water System Name: Le Grand C.S.D

Report Date: 4/30/2024

Type of Water Source(s) in Use: Groundwater Well

Name and General Location of Source(s): Well #1A and Well #4 at 13038 Jefferson St, Le Grand CA 95333.

Drinking Water Source Assessment Information: Completed in April of 2003 – see last page.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: 2d Thursday of each month at 6:00pm at 13038 Jefferson St, Le Grand.

For More Information, Contact: Le Grand C.S.D

(209) 389-4173

About This Report

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.

Terms Used in This Report

Term	Definition
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 <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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 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).
Maximum Residual Disinfectant Level (MRDL)	The highest level of disinfectant is 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.
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Secondary Drinking Water Standards (SDWS)	MCLs are 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.
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.
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)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

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.

Regulation of Drinking Water and Bottled Water Quality

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.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 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	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. coli	0	0	0	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	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	9/27/22	10	0	1*	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/27/22	10	0.07	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)	2022	23.5	18-29	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2022	98	86-110	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 (ppb)	2023	9.4	5.6- 13 *	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronic production wastes
Barium (ppm)	2022	0.17	0.12-0.22	1	2	Discharges of oil drilling wastes and from meta refineries; erosion of natural deposits.
Fluoride (ppm)	2022	0.14	0.11-0.17	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.

Nitrate as Nitrogen (ppm)	2022	2	0.84-3.3	10	10	Runoff and leaching from fertilizer use: leaching from septic tanks and sewage; erosion of natural deposits.
1,2,3 Trichloropropane TCP- (ng/L)	2/28/23	11*	N/A	5	0.7	Discharge from industrial and agricultural chemical factories; leaching from hazardous waste sites; used as cleaning and maintenance solvent, paint and varnish remover and cleaning and degreasing agent; byproduct during the production of other compounds and pesticides.

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
Chloride (ppm)	2022	10	6.1-14	500	N/A	Runoff/leaching from natural deposits; seawater influence.
Color (unit)	10/18/22	5	N/A	15	N/A	Natural-occurring organic materials
Iron (ppb)	10/18/22	96	N/A	300	N/A	Leaching from natural deposits; industrial wastes.
Manganese (ppb)	10/18/22	39	N/A	50	N/A	Leaching from natural deposits.
Specific Conductivity (umho/cm)	2022	325	320-330	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2022	19.5	16-23	500	N/A	Runoff/leaching from natural deposits industrial wastes.
Total Dissolved Solids (ppm)	2022	215	210-220	1000	N/A	Runoff/leaching from natural deposits.
Turbidity (ntu)	2022	7.4*	0.88-14*	5	N/A	Soil runoff.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects

Distribution System Total Trihalomethanes TTHM (ppb)	6/29/23	9.3	80	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.

^{*} Any violation of an MCL, MRDL, AL or TT is asterisked. Additional information regarding the violation is provided on the next page.

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).

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. Le Grand C.S.D 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 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 https://www.epa.gov/lead.

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

In February of 2023, Arsenic was detected at Well #4 above the maximum allowable limit (MCL). The annual average for Arsenic from both wells was withing the acceptable limit.

In February of 2023, 1,2,3 Trichloropropane (1,2,3-TCP) was detected at Well # 1A above the maximum allowable limit (MCL). Some people who drink water containing 1,2,3 TCP in excess of the MCL over many years may have an increased risk of getting cancer.

While your drinking water meets the current EPA standard for Arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects again the cost 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 lined to other health effects such as skin damage and circulatory problems. No corrective action by the State has been required at this time.

In October of 2022, Turbidity was detected at Well #1A above the maximum allowable limit. The annual average for turbidity from both wells was withing the acceptable limit. The State has established the maximum allowable limit for turbidity as a secondary limit, not as a primary limit. This secondary MCL is set to protect you from unpleasant aesthetic effects such as color, taste, odor and staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. A violation of this MCL does not pose a risk to public health.

Le Grand C.S.D routinely monitors the lead levels in the drinking water throughout the city. In September of 2022, one of ten sites chosen showed a lead level over the maximum allowable limit. This single site represents only 10% of the total ten samples chosen. According to State regulations, the whole system is within compliance if 10% or less of the total samples collected exceed the maximum allowable level. Therefore, the overall lead levels in the drinking water were within acceptable limits and considered safe to drink.

Vulnerability Assessment Summary

A source water assessment was conducted for Well #1A and Well #4 of the Le Grand Community Services District water system in April of 2003. Well #4 is considered most vulnerable to the following activities not associated with any detected contaminants: septic systems – high density. A trigger report from the Water Quality Inquiry (WQI) was run and arsenic, iron and manganese were constituents of concern. Although it can be from various possible contaminating activities, the arsenic is believed to be naturally occurring. The PCA inventory indicates Well #4 is most vulnerable to septic tank systems. The well has low nitrate levels and is the deepest well. It is the secondary system well and is operated during the high demand summer months.

Well #1A is considered most vulnerable to the following activities not associated with any detected contaminants: automobile – gas stations and historic gas stations. A trigger report from the Water Quality Inquiry (WQI) was run and 1,2,3 Trichloropropane (1,2,3-TCP) was the only constituent of concern. Although it can be from various possible contaminating activities, the 1,2,3 Trichloropropane (1,2,3-TCP) is believed to be from historical agricultural practices in the areas around the community of Le Grand. It is the lead water supply well for the system. The PCA inventory indicated Well #1A is most vulnerable to automobile gas stations, but there have been no confirmed detections of organic chemicals associated with this type of activity. For more information regarding the assessment summary, contact Le Grand C.S.D. at: (209) 389-4173.