

2022 Consumer Confidence Report

Water System Information

Water System Name: Lake Elizabeth Mutual Water Company

Report Date: 4/11/2023

Type of Water Source(s) in Use: **Surface Water:** State Water Project (Aqueduct) **Ground Water:** Wells

Name and General Location of Source(s): Surface Water: Willow Turnout, Munz Ranch Road.
Ground Water: Brookwood Well and Standby well #2 are within our service area

Drinking Water Source Assessment Information: An assessment of drinking water source (Brookwood Well) for the Water System was completed in April 2009. It was conducted by Lake Elizabeth Mutual Water Company (LEMWC) and California State Department of Public Health, predecessor to the State Water Resources Control Board. (SWRCB or State Board) The source is most vulnerable to activities associated with contaminants; septic systems. A copy is available at the LEMWC office and at SWRCB Office: 500 North Central Ave., Glendale, CA 91203. Surface water assessment can be viewed at <http://www.avek.org/index/cfm?fuseaction=menu&menu-id=5008> or at the office of Antelope Valley-East Kern Water Agency at 6500 W. Ave. N, Palmdale CA, 93551.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: Annual Shareholder's Meeting that is held on the second Tuesday in June at 5:30 PM at 14960 Elizabeth Lake Rd., Elizabeth Lake, CA 93532

For More Information, Contact: Lake Elizabeth Mutual Water Company, Phone: (661) 724-1806

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, 2022 and may include earlier monitoring data.

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Lake Elizabeth Mutual Water Company a 14960 Elizabeth Lake Road, (661) 724-1806 para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系Lake Elizabeth Mutual Water Company以获得中文的帮助: 14960 Elizabeth Lake Road, (661) 724-1806.

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa Lake Elizabeth Mutual Water Company, 14960 Elizabeth Lake Road o tumawag sa (661) 724-1806] para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ [Enter Water System's Name] tại [Enter Water System's Address or Phone Number] để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau Lake Elizabeth Mutual Water Company ntawm (661) 724-1806 rau kev pab hauv lus Askiv.

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 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).
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.
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 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

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	(In the year) Zero (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

Complete if lead or copper is detected in the last sample set.

Lead and Copper	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)	7/14/2021	10	0	0	15	0.2	Not applicable	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	7/14/2021	10	.245 ppm	0	1.3	0.3	Not applicable	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)	10/5/2022	56 ppm	1 sample annually	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	10/5/2022	91.9 ppm	1 sample annually	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	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Turbidity, Laboratory(TT) Surface water	10/5/2022	4.4 NTU	5 NTU	N/A	Soil runoff
Fluoride (mg/L) Surface water	10/5/2022	.2 MG/L	2 MG/L	1 MG/L	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic (ppb) Surface Water	10/5/2022	5 ppb	10 ppb	.004 ppb	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Nitrate (As N) Surface Water (ppm)	May-Nov 2021 4 samples	(average of 4 samples) 0.43 ppm	10 ppm AS N	10 ppm AS N	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Toluene (ppb) (Brookwood well)	3/8/2022	1.3 ppb	150 ppb	150 ppb	Discharge from petroleum and chemical factories; underground gas tank leaks
TTHM (ppb) Distribution system Location 1 and location 2	8 samples 2022	24.5 ppb 23 ppb	80 ppb		Byproduct of drinking water disinfection
HAA5 (ppb) Distribution system Location 1 and location 2	9 samples 2021	21 ppb 31.2 ppb	60 ppb		Byproduct of drinking water disinfection

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	SMCL	Typical Source of Contaminant
Color (Units) Surface water	10/5/2022	35	15	Naturally-occurring organic materials
Chloride (ppm) Surface water	10/5/2022	109 ppm	500 ppm	Runoff/leaching from natural deposits; seawater influence
Odor	10/5/2022	64	3	Naturally-occurring organic materials
Specific Conductance (µS/cm)	10/5/2022	594 µS/cm	1600 µS/cm	Substances that form ions when in water; seawater influence
Turbidity (NTU)	10/5/2022	4.4 NTU	5 NTU	Soil runoff

Surface water				
Total Dissolved Solids (TDS)	10/5/2022	350 ppm	1000 ppm	Runoff/leaching from natural deposits
Sulfate (ppm) Surface water	10/5/2022	76.7 ppm	500 ppm	Runoff/leaching from natural deposits; industrial wastes

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects
Vanadium (ppb) Surface water	10/5/2022	8 ppb	50 ppb	Vanadium exposures resulted in developmental and reproductive effects in rats

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. Lake Elizabeth Mutual Water 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>.

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

MONITORING REQUIREMENTS NOT MET FOR LAKE ELIZABETH MUTUAL WATER COMPANY

Our water system failed to monitor as required for drinking water standards during the past year and, therefore, was in violation of the regulations. Even though this failure was not an emergency, as our customers, you have the right to know what happened, and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. On 12/7/2021 while taking regular bacteriological tests LEMW forgot to log chlorine residual on the bacterial analysis chain of custody and laboratory report. The sample did pass the test.

We are now keeping a field log for all bacteriological tests. This will help with logging information.

There is nothing you need to do at this time.

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Failed to meet requirements for monitoring and reporting.	On 12/7/2021 while taking regular bacteriological tests, LEMW forgot to log the chlorine residual on the bacterial analysis chain of custody and laboratory report for one of the sample sites. The sample DID pass the test.	12/7/2021	LEMW is now keeping a field log for all bacteriological tests.	NONE

For Water Systems Providing Groundwater as a Source of Drinking Water

Table 8. Sampling Results Showing Fecal Indicator-Positive Groundwater Source Samples

Microbiological Contaminants (complete if fecal-indicator detected)	Total No. of Detections	Sample Dates	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant

<i>E. coli</i>	(In the year)				Human and animal fecal waste
Well #2 (Stand-by)	Zero (0)	Weekly	0	(0)	
Brookwood Well	Zero (0)	Monthly	0	(0)	

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: None

Special Notice for Uncorrected Significant Deficiencies: None

Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
None	N/A	N/A	N/A	-

For Systems Providing Surface Water as a Source of Drinking Water

Table 10. Sampling Results Showing Treatment of Surface Water Sources

Treatment Technique ^(a) (Type of approved filtration technology used)	Conventional Treatment Plant
Turbidity Performance Standards ^(b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month 2 – Not exceed 1.0 NTU for more than eight consecutive hours.. 3 – Not exceed 5.0 NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	99.9%
Highest single turbidity measurement during the year	0.3 NTU
Number of violations of any surface water treatment requirements	None

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

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Violation of a Surface Water TT**Table 11. Violation of Surface Water TT**

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
None	N/A	N/A	N/A	-

Summary Information for Operating Under a Variance or Exemption

NONE (0)

Summary Information for Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

If a water system is required to comply with a Level 1 or Level 2 assessment requirement that is not due to an *E. coli* MCL violation, include the following information below [22 CCR section 64481(n)(1)].

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

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.

During the past year we were required to conduct NO Level 1 assessment(s). ZERO (0) Level 1 assessment(s) were completed. In addition, we were required to take NO corrective actions and we completed ALL of these actions.

During the past year NO Level 2 assessments were required to be completed for our water system. ZERO (0) Level 2 assessments were completed. In addition, we were required to take NO corrective actions and we completed ALL of these actions.

Level 2 Assessment Requirement Due to an *E. coli* MCL Violation

E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were required to complete ZERO (0) Level 2 assessment because we found NO *E. coli* in our water system. In addition, we were required to take NO corrective actions and we completed ALL of these actions.

