2024 Consumer Confidence Report

Water System Information

Water System Name: Lake Morena Views Mutual Water Company (LMVMWC)

Report Date: May 2025

Type of Water Source(s) in Use: Groundwater Wells (supplied by local aquifer)

Name and General Location of Source(s): Active Wells 1, 2, and 3 located off Mallard Drive. Standby Well 5 was not used in 2024.

Drinking Water Source Assessment Information: An assessment of the drinking water sources for LMVMWC was conducted in 2002 and is on file with the County of San Diego Department of Environmental Health and State Water Resources Control Board Division of Drinking Water. The water sources are considered most vulnerable to densely spaced septic systems (>1/acre).

Time and Place of Regularly Scheduled Meetings for Public Participation: Quarterly Public Meetings are held at the Lake Morena Community Church, 29765 Oak Dr, Campo, CA 91906. Meeting notices are posted on the LMVMWC website at www.lmvwater.com/public-meetings.

For More Information, contact: Raymond Leon at 619-975-7323 or email lmvwater@gmail.com.

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, 2024, and may include earlier monitoring data.

Importance of This Report Statement in Spanish

Este informe contiene información muy importante sobre su agua para beber. Favor de contactar a LMVMWC llamando al 619-975-7323 o envía un correo electrónico a lmvwater@gmail.com para asistencia en español.

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 *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Term	Definition
Maximum Contaminant Level (MCL)	The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goals (PHGs)) as is economically and technologically feasible.
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.
Notification Level (NL)	Health-based advisory levels established by the Division of Drinking Water (DDW) for chemicals in drinking water that lack maximum contaminant levels (MCLs).
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 Maximum Contaminant Level (SMCL)	MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SMCL do not affect public 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 to protect public health. Like all bottled water companies in California, Culligan is regulated by the U.S. Food and Drug Administration instead of the State Division of Drinking Water. Culligan is required to test water to slightly different standards than those set for community water systems. More information about Culligan's quality standards and water quality reports can be found online at https://www.culliganwater.com/resources/qualitystandards.

About Your Drinking Water Quality

LMVMWC has been issued "**Do Not Drink**" notices for its high levels of nitrate. LMVMWC has levels of nitrate above the nitrate standard, or maximum contaminant level (MCL). Nitrate in drinking water is a serious health concern for infants less than six months old and pregnant women. Bottled water or other water low in nitrates should be used for infants until further notice. Bottled water will be available for delivery for up to 6 months or until a permanent solution has been implemented, whichever comes first. Please contact LMVMWC to be added to the delivery list.

Note: Do not boil the water. Boiling, freezing, filtering, or letting water stand does not reduce the nitrate level. Excessive boiling can make the nitrates more concentrated, because nitrates remain behind when the water evaporates.

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 data reported includes the data range across all the wells. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows LMVMWC 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 a Regulatory Action Level (AL), Maximum Contaminant Level (MCL), Maximum Residual Disinfectant Level (MRDL), or Treatment Technique (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	(In 2024) 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	Sample Date	No. of Samples Collected	90th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	8/30/22	5	7.48	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	8/30/22	5	0.441	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)	2022-2023	55.67	44 – 76	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2023-2024	307	240 – 400	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 [(b)]	Level Detected [(a)]	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Gross Alpha (pCi/L)	**2023-2024**	**38.9 ***	**17.8 – 79.4**	**15**	**(0)**	Erosion of natural deposits
Uranium (pCi/L)	**2024**	**38.57 ***	**13.9 – 98.4**	**20**	**0.43**	Erosion of natural deposits
Nitrate (mg/L)	**2024**	**21.3 ***	**15 – 28**	**10**	**10**	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Arsenic (µg/L)	2022 - 2023	0.7	<0.5 – 1.1	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes

Chemical or Constituent (and reporting units)	Sample Date [b]	Level Detected [a]	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Barium (mg/L)	2022 - 2023	0.34	0.05 – 0.69	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Cadmium (µg/L)	2022 - 2023	0.45	<0.5 – 0.64	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
Fluoride (mg/L)	2023	0.15	0.13 – 0.16	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Chemical or Constituent (and reporting units)	Sample Date [b]	Level Detected [a]	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Selenium (µg/L)	2022 - 2023	0.72	0.61 – 0.85	50	30	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.

a) If more than one sample is collected for a contaminant, the average for each well was calculated and then used to calculate the average for the water system, which is reported as the Level Detected. Any collected sample below the Reporting Limit (<RL) is assumed to be equal to the RL when calculating the average.

b) When a range of years is presented it means that the most recent sample for each well occurred in different years. The most recent sample for each well is used to calculate the level detected and range of detections for each contaminant.

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

Chemical or Constituent (and reporting units)	Sample Date[b]	Level Detected[a]	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Iron (µg/L)	2024	165	<30 – 560	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (µg/L)	2022 - 2023	9.4	<1 – 26	50	N/A	Leaching from natural deposits
Silver (µg/L)	2022 - 2023	0.3	<0.2 – 0.59	100	N/A	Industrial discharges
Turbidity (Units)	2023	3.8	<0.1 – 19	5	N/A	Soil runoff
Total Dissolved Solids (TDS) (mg/L)	07/18/23	817	330 – 1,500	1,000	N/A	Runoff/leaching from natural deposits

Chemical or Constituent (and reporting units)	Sample Date[b]	Level Detected[a]	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Specific Conductance (µS/cm)	07/18/23	1,020	640 – 1,600	1,600	N/A	Substances that form ions when in water; seawater influence
Chloride (mg/L)	2022 - 2023	178	94 – 330	500	N/A	Runoff/leaching from natural deposits; seawater influence
Sulfate (mg/L)	2022 - 2023	22	18 – 28	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Zinc (mg/L)	2022 - 2023	50	< 10 – 130	5	N/A	Runoff/leaching from natural deposits; industrial wastes

a) If more than one sample is collected for a contaminant, the average for each well was calculated and then used to calculate the average for the water system, which is reported as the Level Detected. Any collected sample below the Reporting Limit (<RL) is assumed to be equal to the RL when calculating the average.

b) When a range of years is presented it means that the most recent sample for each well occurred in different years. The most recent sample for each well is used to calculate the level detected and range of detections for each contaminant.

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date[b]	Level Detected[a]	Range of Detections	Notification Level	Health Effects
Alkalinity, Total (ppm)	2023	150	140 – 160	None	
Calcium (ppm)	7/18/2023	80.2	27.7 – 144	None	
Magnesium (ppm)	2022 - 2023	29.5	17.6 – 46.9	None	
pH	7/18/2023	7.1	6.7 – 7.6	None	
PFBA (ppt)	2024	7.0	3.6 – 14	None	
PFBS (ppt)	2024	34.3	16 – 54	500	
PFHpA (ppt)	2024	10.3	3.7 – 17	None	
PFHxA (ppt)	2024	27.9	12 – 45	None	
PFHxS (ppt)	2024	83.2	12 – 230	3	PFHxS has been shown to interfere with thyroid hormones levels. Thyroid hormones

Chemical or Constituent (and reporting units)	Sample Date[(b)]	Level Detected[(a)]	Range of Detections	Notification Level	Health Effects
					are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.
PFOA (ppt)	2024	20.9	6.5 – 35	5.1	Some people who drink water containing PFOA in excess of the Notification Level over many years may experience adverse health effects. PFOA exposures have been shown to cause increased liver weight and cancer in laboratory animals.
PFOS (ppt)	2024	25.2	<1.6 – 85	6.5	Some people who drink water containing PFOS in excess of the Notification Level over many years may experience adverse health effects. PFOS exposures have been shown to cause immune suppression and cancer in

Chemical or Constituent (and reporting units)	Sample Date[(b)]	Level Detected[(a)]	Range of Detections	Notification Level	Health Effects
					laboratory animals.
PFPeA (ppt)	2024	18.4	9.7 – 36	None	
PFPeS (ppt)	2024	8.2	2 – 21	None	

a) If more than one sample is collected for a contaminant, the average for each well was calculated and then used to calculate the average for the water system, which is reported as the Level Detected. Any collected sample below the Reporting Limit (RL) is assumed to be equal to the RL when calculating the average.

b) When a range of years is presented it means that the most recent sample for each well occurred in different years. The most recent sample for each well is used to calculate the level detected and range of detections for each contaminant.

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).

Information about Lead: 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 Morena Views Mutual Water 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. 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.

Information about Nitrate: Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

Information about per- and polyfluoroalkyl substances (PFAS): PFAS are manmade substances that have been synthesized for their water and liquid resistance properties. They have been used extensively in consumer products such as carpets, clothing, fabrics for furniture, paper packaging for food, and other materials (e.g., cookware) designed to be waterproof, stain-resistant or non-stick. In addition, they have been used in fire-retarding foam and various industrial processes. The origin of the contaminant in our water supply at this time is unknown but the water system is working with the State Water Board and other agencies to identify the circumstances of the contamination. The State Water Board and the U.S. Environmental Protection Agency are working to develop national and state standards for PFAS. Please refer to the following links for additional information about PFAS:

- DDW PFAS
  Website: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/pfas.html

- DDW PFAS
  Factsheet: https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/docs/2024/pfas-fact-sheet-ddw-2024.pdf

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

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

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Nitrate MCL Violation	Source monitoring greater than the primary MCL for Nitrate	12/03/2020 – 12/31/24	The interim nitrate treatment facility demonstrated that water treatment would be insufficient to resolve the MCL violation. The long-term solution is to consolidate with Lake Morena's Oak Shores MWC. The engineering design and preparation of a construction funding application for the consolidation project are ongoing.	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.

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Gross Alpha MCL Violation	Source monitoring samples greater than the MCL for Gross Alpha	12/05/2016 – 12/31/24	The long-term solution is to consolidate with Lake Morena's Oak Shores MWC. The engineering design and preparation of a construction funding application for the consolidation project are ongoing.	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 MCL Violation	Source monitoring samples greater than the MCL for Uranium	12/05/2016 – 12/31/24	The long-term solution is to consolidate with Lake Morena's Oak Shores MWC. The engineering design and preparation of a construction funding application for the consolidation project are ongoing.	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.

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
E. coli	(In the year) 0	N/A	0	(0)	Human and animal fecal waste
Enterococci	(In the year) N/A	N/A	TT	N/A	Human and animal fecal waste
Coliphage	(In the year) N/A	N/A	TT	N/A	Human and animal fecal waste

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: N/A

Special Notice for Uncorrected Significant Deficiencies: N/A

Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
N/A				