

The background of the cover is a photograph of a desert landscape. In the foreground, there is a calm river or lake reflecting the sky. A white pickup truck is parked on a sandy bank in the middle ground. The background shows dry, hilly terrain under a clear blue sky. A bright sun is positioned in the upper center, creating a strong lens flare that radiates across the image.

# 2024 Consumer Confidence Report

**Issued March 2025**

## **En Español**

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Mojave Water Agency a 760-946-7000 para asistirlo en español.



# Consumer Confidence Report

The Mojave Water Agency (MWA) conducts extensive water quality tests annually to ensure our region has a clean, sustainable water supply.

The results in our 2024 Consumer Confidence Report represent the most recent sampling, which could be from previous years, as indicated.

We encourage you to review this report which provides a description of where your water comes from and detailed information about your water quality.



**Adnan Anabtawi**  
*General Manager*





# Commitment from our Board of Directors

Mojave Water Agency works diligently to sustainably manage groundwater to benefit the residents and lands within its 4,900-square-mile service area. As one of 29 State Water Project (SWP) Contractors we use sound science to import water from Northern California, combine it with local water supplies, and maintain the infrastructure to ensure the availability and accessibility of water supplies for local use. We do this with robust technology, science, and data management systems to support effective operations and decision-making.

The Regional Recharge and Recovery Project (R3) delivers imported State Water Project water into the local aquifers along the Mojave River in Hesperia and Apple Valley. MWA stores these supplies as groundwater until it is needed, then recovers it for wholesale distribution to local purveyors, including the Victorville Water District, Hesperia Water District, Liberty Utilities (Apple Valley), and City of Adelanto.

Water provided by the Mojave Water Agency has met all of California's Drinking Water standards. Through MWA's trained and certified water professionals, customers have the security of knowing their drinking water has proper monitoring and oversight. We are committed to providing our customers with reliable, high-quality drinking water.



Rick Roelle  
*President*



Marina West  
*Vice President*



Kathy Hoffman  
*Secretary*



Mike Page  
*Treasurer*



Kimberly Cox  
*Director*



Mike Limbaugh  
*Director*



Jesse Ramirez  
*Director*





# 2024

## Drinking Water Quality Test Results Wells 1-5

This report includes results from several tests for various constituents. Mojave Water Agency routinely monitors for constituents in the Agency's drinking water in accordance with Federal and State laws. Substances that are not detected (ND) are not listed. Values accompanied by < indicate a result less than the detection limit.

The results below represent drinking water quality tests performed by Mojave Water Agency on Wells 1, 2, 3, 4, & 5 in the R3 wholesale water system. These wells provide high quality drinking water through service connections to the cities of Victorville, Hesperia, and Adelanto upon request. Contact your local water provider for detailed information on your water quality and where your water comes from.

Inorganic w/ Primary Drinking Water Standards							Wells 1, 2, 3, 4, & 5
Contaminants	Average	Sample Range	MCL	PHG	Sample Date	Violation	Major Sources in Drinking Water
Chromium-(Hexavalent) (ug/L)	0.37	0.24 - 0.54	10	0.02	2024	NO	Erosion of natural deposits; transformation of naturally occurring trivalent chromium to hexavalent chromium by natural processes and human activities such as discharges from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities
Fluoride (mg/L) (Naturally Occurring)	0.28	0.23 - 0.33	2	1	2022	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (mg/L) (NO <sub>3</sub> -N)	0.53	0.47 - 0.64	10	10	2024	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite (mg/L) (as N)	0.53	0.47 - 0.64	10	10	2024	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radioactive Contaminants							Wells 1, 2, 3, 4, & 5
Uranium (pCi/L)	<1.0	<1.0 - 1.2	20	0.43	2022	NO	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	<1.0	<1.0 - 1.4	5	0	2022	NO	Erosion of natural deposits
Disinfectant Byproducts							Sample results are from the distribution system from Wells 1, 2, 3, 4, & 5
Total Trihalomethanes (ug/L) (TTHM)	3.2	<1.0 - 9.60	80	N/A	2024	NO	Byproduct of drinking water disinfection
Regulated Contaminants with Secondary Maximum Contaminant Levels							Wells 1, 2, 3, 4, & 5
Contaminants	Average	Sample Range	Secondary MCL	Sample Date	Violation	Major Sources in Drinking Water	
Chloride (mg/L)	24	19 - 29	500	2022	NO	Runoff/leaching from natural deposits; seawater influence	
Foaming Agents (MBAS) (ug/L)	<100	<100 - 100	500	2022	NO	Municipal and industrial wastes discharges	
Odor (units)	1	1	3	2022	NO	Naturally occurring organic materials	
Specific Conductance (uS/cm)	262	240 - 290	1600	2022	NO	Substances that form ions when in water; seawater influence	
Sulfate (mg/L)	15	12 - 17	500	2022	NO	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (mg/L)	170	140 - 190	1000	2022	NO	Runoff/leaching from natural deposits	
Turbidity (NTU)	0.17	<0.10 - 0.40	5	2022	NO	Soil runoff	
Disinfection Residuals							Sample results are from the distribution system from Wells 1, 2, 3, 4, & 5
Constituent	Average	Sample Range	MCL	PHG (MCLG)	Sample Date	Major Sources in Drinking Water	
Chlorine (mg/L)	0.45	0.09 - 0.92	4	4	Weekly	Drinking water disinfectant added for treatment	
Constituents that may be of interest to consumers							Wells 1, 2, 3, 4, & 5
Constituents	Average	Range	Sample Date	Note			
Bicarbonate (mg/L)	82	80 - 86	2022	No PHG or MCL's available			
Calcium (mg/L)	30	28 - 32	2022	No PHG or MCL's available			
Magnesium (mg/L)	4.5	4.3 - 4.8	2022	No PHG or MCL's available			
pH	7.3	7.1 - 7.7	2022	No PHG or MCL's available			
Potassium (mg/L)	1.5	1.5 - 1.6	2022	No PHG or MCL's available			
Sodium (mg/L)	16	15 - 17	2022	No PHG or MCL's available			
Total Alkalinity (as CaCO <sub>3</sub> ) (mg/L)	67	66 - 71	2022	No PHG or MCL's available			
Total Hardness (as CaCO <sub>3</sub> ) (mg/L)	94	88 - 100	2022	No PHG or MCL's available			
Aggressive Index	11.20	10.77 - 11.40	2022	No PHG or MCL's available			





# 2024 Drinking Water Quality Test Results

## Well 6

The results below represent drinking water quality tests performed by Mojave Water Agency on Well 6, which provides water to Liberty Utilities (Apple Valley) upon request.

Inorganic w/ Primary Drinking Water Standards							Well 6
Contaminants	Average	Sample Range	MCL	PHG	Sample Date	Violation	Major Sources in Drinking Water
Chromium-(Hexavalent) (ug/L)	0.23	0.23	10	0.02	2024	NO	Erosion of natural deposits; transformation of naturally occurring trivalent chromium to hexavalent chromium by natural processes and human activities such as discharges from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities
Fluoride (mg/L) (Naturally Occurring)	0.26	0.26	2	1	2022	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (mg/L) (NO3-N)	0.55	0.55	10	10	2024	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite (mg/L) (as N)	0.55	0.55	10	10	2024	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radioactive Contaminants							Well 6
Radium 226 + 228 (pCi/L)	<1.0	<1.0 - 1.1	5	0	2022	NO	Erosion of natural deposits
Regulated Contaminants with Secondary Maximum Contaminant Levels							Well 6
Contaminants	Average	Sample Range	Secondary MCL	Sample Date	Violation	Major Sources in Drinking Water	
Chloride (mg/L)	28	28	500	2022	NO	Runoff/leaching from natural deposits; seawater influence	
Odor (units)	1	1	3	2022	NO	Naturally occurring organic materials	
Specific Conductance (µS/cm)	270	270	1600	2022	NO	Substances that form ions when in water; seawater influence	
Sulfate (mg/L)	16	16	500	2022	NO	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (mg/L)	170	170	1000	2022	NO	Runoff/leaching from natural deposits	
Constituents that may be of interest to consumers							Well 6
Constituents	Average	Range	Sample Date	Note			
Bicarbonate (mg/L)	86	86	2022	No PHG or MCL's available			
Calcium (mg/L)	31	31	2022	No PHG or MCL's available			
Magnesium (mg/L)	4.8	4.8	2022	No PHG or MCL's available			
pH	7.5	7.5	2022	No PHG or MCL's available			
Potassium (mg/L)	1.7	1.7	2022	No PHG or MCL's available			
Sodium (mg/L)	17	17	2022	No PHG or MCL's available			
Total Alkalinity (as CaCO3) (mg/L)	70	70	2022	No PHG or MCL's available			
Total Hardness (as CaCO3) (mg/L)	98	98	2022	No PHG or MCL's available			
Aggressive Index	11.20	11.20	2022	No PHG or MCL's available			

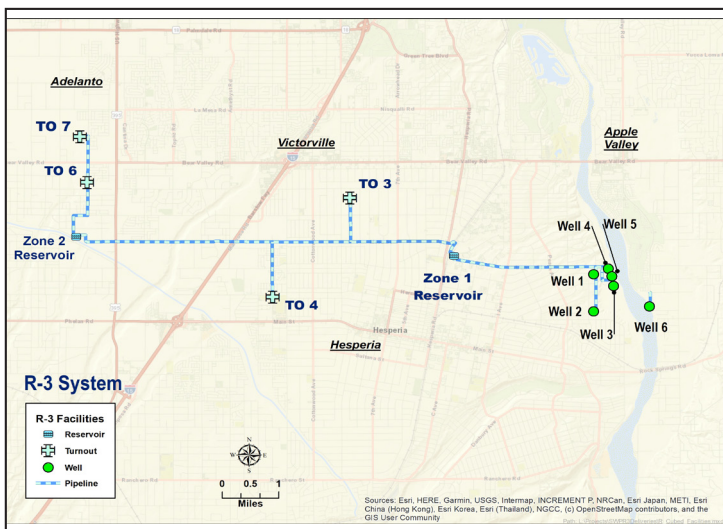


# Regional Recharge and Recovery

## Water Supply

Mojave Water Agency's R3 water supply is 100 percent groundwater. The Agency obtains its source of groundwater from six (6) vertical wells which are located in the Alto Subarea of the Upper Mojave River Groundwater Basin. Each well has a capacity of approximately 3,500 gallons per minute. The Agency maintains two (2) storage reservoirs that have a combined capacity of approximately 7.5 million gallons.

To help monitor and keep your water safe, staff uses a Supervisory Control and Data Acquisition (SCADA) system to monitor reservoir levels, chlorine levels, and well status. The SCADA system provides remote operation and monitoring capabilities, increased security, and advanced notification. This is just one of the ways the Agency provides you with safe and reliable drinking water.



### Source Water Assessment

Source water assessments were conducted for Wells 1-5 in June 2012 and Well 6 was conducted in September 2011. The assessments are summarized in the table below. A copy of the complete source water assessment and vulnerability assessment can be obtained by contacting the Mojave Water Agency at 13846 Conference Center Dr., Apple Valley, CA 92307; or the State Water Resources Control Board (SWRCB), 464 West 4th Street, Suite 437, San Bernardino, CA 92401. You may request a summary of the assessments be mailed to you by contacting the Mojave Water Agency at (760) 946-7000 or SWRCB District Engineer at (909) 383-4328.

Source Number	Source ID	Most Vulnerable Activities (PCA)
001	Well No.1	Animal feeding operations as defined in federal regulations <sup>2</sup> - Septic systems– high density [ $>1/\text{acre}$ ]
002	Well No.2	Animal feeding operations as defined in federal regulations <sup>2</sup> - Septic systems– high density [ $>1/\text{acre}$ ]
003	Well No.3	Animal feeding operations as defined in federal regulations <sup>2</sup>
004	Well No.4	Animal feeding operations as defined in federal regulations <sup>2</sup>
005	Well No.5	Animal feeding operations as defined in federal regulations <sup>2</sup>
006	Well No.6	Animal feeding operations as defined in federal regulations <sup>2</sup> - Septic systems– high density [ $>1/\text{acre}$ ] Wells– Agricultural / Irrigation





# Water in the Environment

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 occur naturally 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. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations and California law establish limits for contaminants in bottled water that provide the same protection for public health.

# Additional General Information About Drinking Water

## Are special precautions needed?



Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing.

Mojave Water Agency is responsible for providing high quality drinking water but cannot control the variety of materials used in the plumbing in your home. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing.

Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact your water service provider or Mojave Water Agency at (760) 946-7000. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead> or the U.S. EPA Safe Drinking Water Hotline at 1-800-426-4791.

The Mojave Water Agency is a water wholesaler and does not provide water service to retail customers. As a result, the lead service line inventory is not applicable. Additional information on lead in drinking water is available at <https://www.epa.gov/safewater/lead>.







# Sensitive populations may be more vulnerable

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.

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 water poses a health risk. The tables in this report indicate which minerals and substances have been detected in the water provided by Mojave Water Agency. More information about contaminants and potential health effects can be obtained by calling the U.S. EPA Safe Drinking Water Hotline at 1-800-426-4791.

You can also go to the following websites for more information:

**U.S. EPA** - [www.epa.gov/safewater](http://www.epa.gov/safewater)

**CA State Water Resources Control Board** -

[www.waterboards.ca.gov/drinking\\_water/programs/](http://www.waterboards.ca.gov/drinking_water/programs/)



## Common Abbreviations

**NA:** Not applicable.

**ND:** Non-detected.

**NTU:** Nephelometric Turbidity Units.

**µS/cm:** a measure of conductance.

**pCi/L:** picocuries per liter (a measure of radioactivity).

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

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

**< :** Less than the detection limit.

1 mg/L is equivalent to one second of time in approx. 11 1/2 days.

1 ug/L is equivalent to one second of time in approx. 32 years.

# Definitions



**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCL's are set as close to the PHG's (or MCLG's) 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. MCLG's are set by the U.S. Environmental Protection Agency (USEPA).

**Maximum Residual Disinfectant Level (MRDL):** 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. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Notification Level (NL):** The concentration of a contaminant which, if exceeded, triggers notification to local political jurisdictions and customers.

**Primary Drinking Water Standard (PDWS):** MCLs, MRDLs and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting requirements.

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHG's are set by the California Environmental Protection Agency.

**Regulatory Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**Secondary Drinking Water Standard:** Requirements that ensure appearance, taste, and smell of drinking water are acceptable.

**Secondary MCL's (SMCL):** Are set to protect the odor, taste, and appearance of drinking water.

**Unregulated Contaminants:** Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For additional information, call the Safe Drinking Water Hotline at (800) 426-4791.





# How We Protect Water Quality

*For you and your family*

## 1. Extensive Testing

Water quality technicians test the water weekly for bacteriological activity at six locations. We also perform bacteriological tests on each active well site monthly. The samples are tested by an independent state certified lab.

## 2. Disinfect for Safety

A small amount of chlorine is added at a centralized location on a continual basis to ensure the water remains free of any bacteria.

## 3. Flush the System

Staff periodically flushes water out of blow-offs, key flush points within the distribution system, at a high velocity to remove small amounts of natural sand and minerals that can slowly build up in pipelines. This happens because our water comes from deep groundwater wells.



## Contact Us

For questions, contact  
Operations Manager Doug  
Kerns during our regular office  
hours:

M-Th 8 a.m. – 5 p.m.  
Alternating Fridays  
8 a.m. – 4:30 p.m.  
Closed on Holidays

(760) 946-7000  
[www.MojaveWater.org](http://www.MojaveWater.org)  
[PublicAffairs@mojavewater.org](mailto:PublicAffairs@mojavewater.org)

13846 Conference Center Dr.  
Apple Valley, CA 92307

MWA Board Meetings are open  
to the public at 9:30 a.m. on the  
second and fourth Thursday of  
each month

[www.mojavewater.org](http://www.mojavewater.org) - 11

