

# Mojave Water Agency

## 2020 Consumer Confidence Report

*We are pleased to provide you with our annual Consumer Confidence Report. It provides the results of our extensive water quality tests conducted in 2020. Some results, however, 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.*

Kathy Cortner, General Manager  
March 2021



*Together, we're securing water for today and tomorrow...*





**Mojave Water Agency Board of Directors: Top row left to right Kimberly Cox, Treasurer; Jim Ventura, President; Ken Anderson; and Mike Page, Secretary. Bottom row left to right are Rick Roelle, Jeanette Hayhurst, Vice President; and Michael Limbaugh.**

### *From the Board of Directors*

## **Our commitment to you...**

More than 50 years ago, the voters in the Mojave Desert region approved the creation of an organization, the Mojave Water Agency (MWA), that would participate in the State Water Project (SWP) to bring water from northern California to the desert.

In 2013, MWA completed the first phase of the Regional Recharge and Recovery Project (R3) which pumps imported and stored SWP water using groundwater wells from our local aquifers along the Mojave River in Hesperia and Apple Valley. MWA, a water wholesaler, is able to provide this water to local purveyors, such as the Victorville Water District, Hesperia Water District, Liberty Utilities, and soon, City of Adelanto.

We are proud to announce that water provided by the Mojave Water Agency has met all 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.

MWA Board meetings are held on the 2<sup>nd</sup> and 4<sup>th</sup> Thursday of the month at 9:30 a.m.

MWA can be reached at (760) 946-7000  
and is located at 13846 Conference Center Drive, Apple Valley

**For information on agenda items, visit our website at [www.mojavewater.org](http://www.mojavewater.org)**

# Adelanto Joins MWA R3 Project

MWA's Regional, Recharge and Recovery (R3) Project is a water supply project located in the Victor Valley that utilizes aquifer (groundwater) storage capacity in the Mojave River Groundwater Basin to enhance the natural High Desert regional water supply. This is accomplished by recharging local groundwater basins using imported water from the California Aqueduct, which is part of the State Water Project (SWP). A series of groundwater wells, large-diameter pipe systems, and booster pumps move water to local communities. The project was launched in 2013 with pipelines in Hesperia, Victorville, and Apple Valley.



Recently, in September 2020, a planned extension of the R3 Project was initiated to extend the R3 water system to the City of Adelanto. Officials from Adelanto, the City of Victorville, and the Mojave Water Agency celebrated the groundbreaking of the R3 project extension. Construction of the project is estimated to be completed by April 2021, with a construction cost of approximately \$5.1 million. The project is funded by Mojave Water Agency, the City of Adelanto, and grant funds from the U.S. Bureau of Reclamation and the Department of Water Resources Prop. 1 Program.

The project will extend water delivery service by constructing approximately one mile of underground pipeline, beginning at MWA's existing turnout and continuing to the City of Adelanto.



# Results of our 2020 Drinking Water Quality Tests

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 the R3 wholesale water system and represents water produced from Wells 1, 2, 3, 4, & 5. These wells provide high quality drinking water through service connections to the cities of Victorville and Hesperia 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
Fluoride (mg/L) (Naturally Occurring)	0.28	0.25 - 0.32	2	1	2019	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as N (mg/L) (NO3-N)	0.51	0.44 - 0.60	10	10	2020	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite (mg/L) (as N)	0.51	0.44 - 0.60	10	10	2020	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)	0.72	<1.0 - 1.3	20	0.43	2019	NO	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	<1.0	<1.0 - 1.8	5	0	2019	NO	Erosion of natural deposits
Disinfectant Byproducts							Sample results are from the distribution system from Wells 1, 2, 3, 4, & 5
Haloacetic Acids (ug/L) (HAA5)	<1.0	<1.0 - 1.6	60	N/A	2020	NO	Byproduct of drinking water disinfection
Total Trihalomethanes (ug/L) (TTHM)	6.0	<1.0 - 14.6	80	N/A	2020	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)	22	18 - 25	500	2019	NO	Runoff/leaching from natural deposits; seawater influence	
Odor (units)	1	1	3	2019	NO	Naturally occurring organic materials	
Specific Conductance (µS/cm)	240	220 - 250	1600	2019	NO	Substances that form ions when in water; seawater influence	
Sulfate (mg/L)	15	13 - 17	500	2019	NO	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (mg/L)	146	130 - 170	1000	2019	NO	Runoff/leaching from natural deposits	
Turbidity (NTU)	<0.10	<0.10 - 0.60	5	2019	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)	0.53	0.20 - 1.11	4	4	Weekly	Drinking water disinfectant added for treatment	
Unregulated Contaminants							Wells 1, 2, 3, 4, & 5
Contaminants	Average	Sample Range	MCL	PHG (MCLG)	NL	Sample Date	Major Sources in Drinking Water
Vanadium (ug/L)	<3.0	<3.0 - 3.2	None	None	50	2019	Vanadium is a naturally occurring "rare earth" element that is found in the earth's crust
Constituents that may be of interest to consumers							Wells 1, 2, 3, 4, & 5
Constituents	Average	Range	Sample Date	Note			
Bicarbonate (mg/L)	86	81 - 89	2019	No PHG or MCL's available			
Calcium (mg/L)	27	24 - 30	2019	No PHG or MCL's available			
Magnesium (mg/L)	4.2	3.5 - 4.9	2019	No PHG or MCL's available			
pH	7.5	7.4 - 7.7	2019	No PHG or MCL's available			
Potassium (mg/L)	1.5	1.3 - 1.6	2019	No PHG or MCL's available			
Sodium (mg/L)	15	14 - 16	2019	No PHG or MCL's available			
Total Alkalinity (as CaCO3) (mg/L)	70	67 - 73	2019	No PHG or MCL's available			
Total Hardness (as CaCO3) (mg/L)	86	73 - 96	2019	No PHG or MCL's available			
Aggressive Index	11.21	11.09 - 11.34	2019	No PHG or MCL's available			

## 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 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.

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



## How we protect water quality for you and your family

### Extensive Testing

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

### 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.

### Flush to Keep the System Clean

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.

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/index.html](http://www.waterboards.ca.gov/drinking_water/programs/index.html)

## Source Water Assessment

Source water assessments were conducted for Wells 1-5 in June 2012. 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/acre]
002	Well No.2	Animal feeding operations as defined in federal regulations <sup>2</sup> - Septic systems– high density [>1/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>

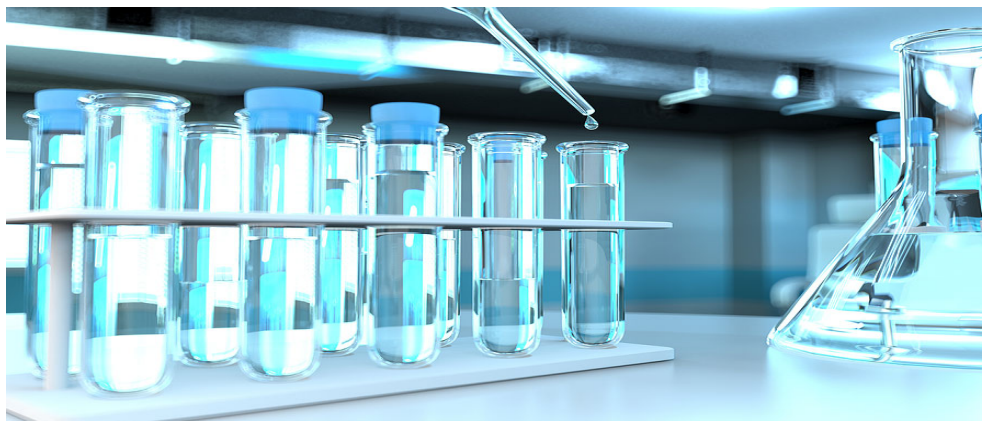
## Additional General Information on Drinking Water

### Are Special Precautions Needed?

Infants and young children are typically more vulnerable to lead in drinking water than the general population. 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. 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. Mojave Water Agency 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. For information on lead in drinking water, testing methods, and steps you can take to minimize exposure please check <https://www.epa.gov/lead> or call the Safe Drinking Water Hotline, 1-800-426-4791.

### 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.



## 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.

**NA:** Not applicable.

**ND:** Not 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.

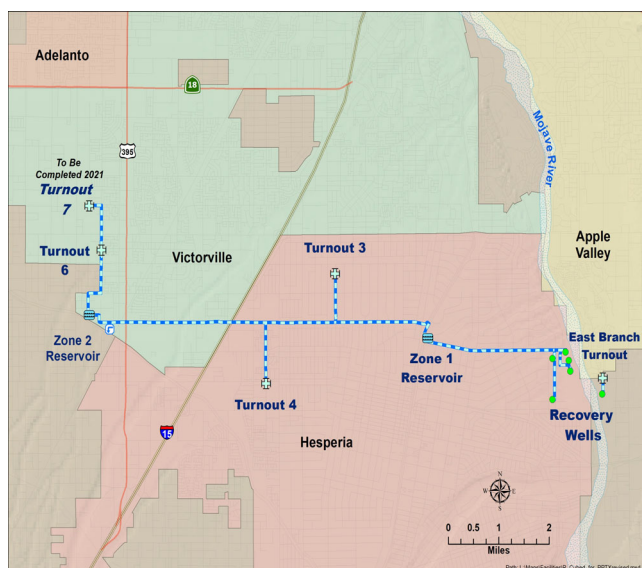
1 mg/L is equivalent to one second of time in approx. 11 1/2 days.

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

## 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. (During 2020 just five wells were in production). The Agency maintains two storage reservoirs which have a combined capacity of approximately 7.5 million gallons.

To help monitor and keep your water safe, staff uses a state of the art 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.



## Need more information...

### Questions

For questions about this report or concerning the water system, please contact Michael Simpson, Director of Operations at 760-946-7000 during our regular office hours: Monday-Thursday 8:00 am – 5:00 pm / Friday 8:00 am – 4:30 pm. **Closed on Holidays and alternating Fridays.**

### En Español

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien, 760-946-7000.