2021
CONSUMER CONFIDENCE REPORT

Issued May 2022

The City of Adelanto and PERC Water are pleased to provide our annual Consumer Confidence Report (CCR). It provides the results of our extensive water quality tests conducted in 2021.

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, 2021 and may include earlier monitoring data.

City Council Meetings are open to the public at 7:00pm on the 2nd and 4th Wednesday of each month at Adelanto Governmental Center, 11600 Air Expressway, Adelanto.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse City of Adelanto a (760) 246-2300 para asistirlo en español.

Where Does My Water Come From?

In 2021, about **4.03 million gallons of water** were pumped each day from a combination of eight (8) of the city's active wells. This pumped water comes from underground storage areas (called "aquifers") located within the city and along the Mojave River. These aquifers are recharged by rainfall, snowmelt, and (artificially) by the State Water Project. The City of Adelanto is also connected to the Mojave Water Agency's Regional Recharge and Recovery (R3) Project. In addition, the city has an emergency source connection with the City of Victorville for backup or emergency needs.

Questions:

For questions about this report or the water system, contact Senior Area Operations Manager, Daniel Best at dbest@percwater.com or (760) 246-2300.

Understanding Your Water

Is My Water Clean and Safe?

Before the water reaches your tap, samples from wells and **36 individual locations throughout the City of Adelanto have been collected and tested in State certified laboratories**. In this report, we summarize the extensive certified third-party laboratory data and test results in a simple manner to inform you of the high-quality drinking water provided for the City of Adelanto. In 2001, the California Department of Public Health (CDPHS) conducted a source water assessment of all fifteen (15) of the City's water wells. The purpose of this assessment was to determine the vulnerability of the wells to "possible contaminating activities." A copy of the complete assessment may be viewed at the City of Adelanto Water Department or at the CDPHS San Bernardino District Office, 464 W. Street, Suite 437, San Bernardino, CA 92401.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells.

The EPA would like you to know:

"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. 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."

Throughout California, the EPA wants you to be aware that 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.

DRINKING WATER QUALITY
Test Results

Wells
2021

This section of the report contains summary information for contaminants exceeding an MCL, MRDL, AL or a violation of any treatment technique or monitoring reporting requirement. We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards.

While your drinking water meets the federal and state standard for arsenic, it does contain low levels of this contaminant. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs 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 linked to other health effects such as skin damage and circulatory problems. Throughout 2020, water in Adelanto was tested to have, on average, very low levels of Arsenic.

Filtration treatment is required for Iron and Manganese for wells 1G, 3G2, 4G, and 8G2 and is performed at the city's water treatment plant on Turner Road.

Inorganic Contaminants – Primary Drinking Water Standards						
Contaminant	Average	Sample Range	MCL	Violation	Sample Date	Major Sources in Drinking Water
Arsenic (ppb)	0.23	0.00 – 6.10	10	NO	2021	Erosion of natural deposits (post treatment)
Fluoride (ppm)	0.45	0.27 – 2.60	2	NO	2021	Naturally present in the environment (post treatment)
Gross Alpha (pCi/L)	4.00	0.00 – 12.00	15	NO	2020	Erosion of natural deposits (pretreatment)
Nitrate (ppm)	0.16	0.00 – 0.67	10	NO	2021	Runoff and leaching from: fertilizer use, septic tanks, sewage, erosion of natural deposits
Total Chromium	0.00	0.00 – 0.00	50	NO	2020	Discharge from steel and pulp mill, chrome plating, erosion of natural deposits
Disinfection By-Products						
Haloacetic Acid (ug /L) (HAA5)	7.94	1.80 – 11.40	60	NO	2021	By-product of disinfecting drinking water
Total Trihalomethanes (ug/L) (TTHM)	32.44	11.10 – 54.40	80	NO	2021	By-product of disinfecting drinking water
Radioactive Contaminants						
Gross Alpha (pCi/L)	4.00	0.00 – 12.00	15	NO	2020	Erosion of natural deposits
Regulated Contaminants with Secondary Maximum Contaminant Levels						
Contaminant	Average	Sample Range	Secondary MCL	Violation	Sample Date	Major Sources in Drinking Water
Chloride (ppm)	45	0.00 – 100	500	NO	2020	Runoff/leaching from natural deposits; seawater influence
Iron (ug/L)	31.28	0.00 – 1600	300	NO	2021	Naturally present; industrial waste (post treatment)
Manganese (ug/l)	68.87	0.00 - 790	50	NO	2021	Naturally present in the environment (post treatment)
Odor (units)	1.00	0.00 – 1.00	3	NO	2020	Naturally present in the environment
Specific Conductance (µS/cm)	673	420 – 1100	1600	NO	2020	Naturally present in the environment
Sulfate (mg/L)	159	47 – 240	500	NO	2020	Naturally present in the environment
Total Dissolved Solids (mg/L)	403	250 – 650	1000	NO	2020	Naturally present in the environment
Turbidity (NTU)	3.30	0.00 – 10.00	5.00	NO	2020	Naturally present in the environment
Lead and Copper							
Contaminant	No. of Samples	90th Percentile	Level Detected	Action Level	Sites Over AL	PHG	Sources
Lead (ug/L)	30	None	ND	1.3	None	0.03	Customer household plumbing
Copper (ug/L)	30	None	ND	0.015	None	0.0002	Customer household plumbing
Microbial Contaminants							
Contaminant	No. of Detections	Months in Violation	Maximum Contaminant Level (MCL)			MCLG	Source
Total Coliform	0	0	More than 5% of positive monthly samples			0	Naturally present in the environment
Fecal Coliform or E. Coli	0	0	Routine or repeat sample detects coliform and E. Coli			0	Human and animal fecal waste
Unregulated Constituents That May Be of Interest to Consumers							
Constituent	Average	Range	Sample Date	Notes			
Calcium (mg/L)	38	9.7 – 74.0	2020	No MCL or PHG			
Hardness (mg/L)	119	24 - 230	2020	No MCL or PHG			
Magnesium (mg/L)	66	0.0 – 9.6	2020	No MCL or PHG			
Sodium (mg/L)	104	48 - 330	2020	No MCL or PHG			
Total Alkalinity (mg/L) (as CaCO3)	136	70 – 200	2019	No MCL or PHG			

2021 City of Victorville

DRINKING WATER QUALITY Test Results

During the months of May, June and July of 2021, the City of Adelanto imported water from the City of Victorville due to a shortage of water supply from its active wells. The City of Victorville imports water from the Mojave Water Agency. The City of Adelanto also began importing water from the Mojave Water Agency Regional Recharge and Recovery (R3) project in July and continued through December of 2021. The following two tables include sample results from the distribution system and source water supply, including water imported from the City of Victorville and Mojave Water Agency.

2021 CCR Data

Inorganic Contaminants

	VWD Average	VWD Range	MCL	PHG (MCLG)	Violation	Major Sources in Drinking Water
Arsenic* (ppb)	8.4	0-20	10	0.004	NO	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Total Chromium (ppb)	0.5	0-11	50	100	NO	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Chromium 6 (ppb)	5.4	0-19	50	.02	NO	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, textile manufacturing facilities, erosion of natural deposits
Fluoride (ppm)	0.43	0-1	2.0	1	NO	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as No3) (ppm)	1.08	0-3	10	10	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits

Disinfection Byproducts

	VWD Average	VWD Range	MCL	PHG (MCLG)	Violation	Major Sources in Drinking Water
Total Trihalomethanes (TTHMs) (ppb)	4.5	0 - 24	80	n/a	No	By-product of drinking water chlorination
Total Haloacetic Acid (HAA5) (ppb)	0.01	0 - 3	60	n/a	No	By-product of drinking water chlorination

Disinfectants

	VWD Average	VWD Range	MRDL	MRDLG	Violation	
Chlorine (ppm)	0.72	.20 - 1.20	4	4	NO	Drinking water disinfectant added for treatment

Lead and Copper

	# of Samples	90th Percentile Level Detected	Sites over AL	AL	PHG	Major Sources in Drinking water
Lead (total) (pbb)	34	none	N/D	N/D	1.3	0.03	Customer Household Plumbing
Copper (total) (ppb)	34	none	N/D	N/D	0.015	0.0002	Customer Household Plumbing

Regulated Contaminants with Secondary MCLs

	VWD Average	VWD Range	Secondary MCL	Violation	Typical Source of Contaminant
Chloride (ppm)	7.6	1 - 52	500	NO	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (Micromhos)	241.92	170-420	1600	NO	Substances that form ions when in water; seawater influence
Sulfate (ppm)	19	2 - 140	500	NO	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	160	100-260	1000	NO	Runoff/leaching from natural deposits
Turbidity (NTU)	<1	0-1	5	NO	Soil runoff

Unregulated Parameters That May be of Interest to Consumers

	VWD Average	VWD Range	MCL	PHG (MCLG)	Notification Level
Alkalinity (ppm)	88.2	59-120	N/S	N/S	
Calcium (ppm)	9.0	0-32	N/S	N/S	
Hardness (ppm)	24.6	0-99	N/S	N/S	
Magnesium (ppm)	0.48	0-5	N/S	N/S	
Potassium (ppm)	0.6	0-3	N/S	N/S	
Sodium (ppm)	45.8	0-65	N/S	N/S	

Microbiological Contaminants

	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	More than 5% of Monthly Samples are Positve	0	Naturally present in the Environment
Fecal Cliform or E. Coli	0	0	A routine Sample and a repeat sample detect total coliform and either sample also detects fecal coliform or E. Coli.	0	Human and Animal fecal waste

Drinking Water Quality Test Results

2021 Mojave Water Agency

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
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	0.47 - 0.60	10	10	2021	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	0.47 - 0.60	10	10	2021	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)	1.8	<1.0 - 4.9	60	N/A	2021	NO	Byproduct of drinking water disinfection
Total Trihalomethanes (ug/L) (TTHM)	12.7	2.1 - 29.3	80	N/A	2021	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)	0.45	0.18 - 1.20	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

Regional Recharge & Recovery

MWA R3 Project
Adelanto Connection

As California faces its third worst drought in recorded history, the residents of Adelanto now have access to potable drinking water sourced from the Mojave Water Agency's Regional Recharge and Recovery Project (R3).

In 1960, the Mojave Water Agency was formed when voters approved to participate in the State Water Project. This resulted in the construction of an infrastructure system of canals, dams, storage facilities, and pipelines to deliver water from Northern California and store it in the local aquifer to enhance, or "recharge," the water supply of the Mojave Basin.

The first phase of the Mojave Water Agency's R3 project was launched in 2013 to deliver these Mojave Basin water supplies to Hesperia, Victorville and Apple Valley.

The Adelanto extension was planned since the inception of the project and was completed June 18, 2021 with a ribbon-cutting celebration.

Adelanto Mayor Gabriel Reyes, said, "This project is an important investment in the infrastructure of our community. Adelanto can now be sustainable with this amazing partnership."

Constructed by Nicholas Construction, Inc. and managed by engineering firm Kennedy Jenks, the project cost was $5.1 million, which was funded by the 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.

Kimberly Cox, MWA Division 1 Director, said, "This project was critical to the Agency's mission to collaboratively manage groundwater basins sustainably, import water responsibly, and address risks proactively using sound science."

ADDITIONAL INFORMATION ABOUT Drinking Water & Conservation Tips

Water quality regulations are strictly enforced on a state and federal level. The California State Water Resources Control Board (SWRCB) monitors all listed contaminants plus bacteriological samples taken on a weekly basis.

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.

More information about contaminants and potential health effects can be obtained by calling the **USEPA's 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. USEPA/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).**

Conservation Tips

Did you know that almost **20% of electricity** and more than **30% of natural gas** in California is used to treat, transport, and use water? It's a win-win situation - when you save water, you save energy too! That's good for the earth, and good for your energy bill.

Below are some tips for you and your family to save water, energy, and money. By working together, we can do our part to minimize the effects of drought in CA.

- Take shorter showers: reduce you shower by 1-2 minutes and save 5 gallons.
- Turn the water off while brushing your teeth: Save 3 gallons each time.
- Fix leaky faucets: Save 15 to 50 gallons per day.
- Water your lawn before 8 am: Reduce evaporation and save about 25 gallons each time.
- Mow your lawn with the blade set at 2-3 inches: longer grass shades the soil, reduces evaporation, and encourages deeper roots to develop. This helps grass survive drought, tolerate insect damage and fend off disease.
- While shaving, plug the sink instead of letting the water run: Save 300 gallons per month.
- Always use a broom to clean walkways, driveways, decks and porches, rather than hosing off these areas: You can save as much as 100 gallons of water cleaning your driveway and yard by sweeping instead of using the hose. Plus, it's good exercise!
- Replace your grass with turf or drought-resistant plants: Outdoor water use accounts for 50%-70% of all household water use. Making the switch will save water and cash.

Definitions

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 (USEPA).

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): Notification levels are health based advisory levels established by CDPH 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 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.

NA: Not applicable.

ND: Not detectable at testing limit.

NTD: Nephelometric Turbidity Units.

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)