# CITY OF VICTORVILLE WATER DISTRICT

### 2022 Consumer Confidence Report

Issued May 2023



### **HIGH QUALITY, GOOD TASTING WATER**

We are pleased to provide you with this year's report on water quality. Victorville Water District is committed to continuously serve reliable, affordable, and high-quality water that is known for its good taste.

We deliver over seven billion gallons of water to our customers—most of it from a local underground basin called the Alto Subarea of the Upper Mojave River Basin. Additionally, we purchase water from Mojave Water Agency, whose water source also comes from wells in the Alto Subarea that are replenished with imported water.

Our water is delivered through a system of 34 wells and a large system of pipelines, pumps, reservoirs, treatment plants, and other facilities. Please see the inside pages to learn more about the high-quality water we deliver to you.

#### **BOARD OF DIRECTORS**

Debra Jones, Mayor Elizabeth Becerra, Mayor Pro Tem Blanca Gómez, Council Member Bob Harriman, Council Member Leslie Irving, Council Member

MANAGEMENT Arnold Villarreal, Water Manager 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. State Water Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

#### **MORE INFORMATION ABOUT 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 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).

### **ADVICE FOR IMMUNO-COMPROMISED INDIVIDUALS**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised individuals such as a person with cancer undergoing chemotherapy, people 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 WATER QUALITY**

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. Additionally, water can also 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.

### **DRINKING WATER SOURCE ASSESSMENT AND PROTECTION PROGRAM**

Source water assessments were conducted in 2002 for all active wells and in 2010 for wells #144 and #209 to identify potential sources of contamination and help develop methods to protect the water supply.

All District water comes from an underground aquifer that is potentially vulnerable to contamination from a variety of sources, including: high-density housing; commercial, industrial, and residential sewer collection systems; apartments and condominiums; auto gasoline stations and body and repair shops; golf courses; high and low density septic systems; electronic and electrical manufacturing; dry cleaners; funeral homes and grave-yards; utility stations and maintenance areas; underground storage tanks that leak; sand and gravel mining; wood pulp, paper processing and mills; fleet, truck and bus terminals; animal operations; illegal activities, including unauthorized dumping; transportation corridors, including roads, streets, freeways and state highways; furniture repair and manufacturing; contractor and government agency equipment storage yards; and office buildings and complexes; mall parking lots; other water supply wells; storm drain discharge points; injection wells, dry wells, and sumps; RV and mini storage; transportation corridors, monitoring and test wells; and contractor and government agency equipment storage yards; hardware, lumber, and parts stores; and motor pools.



**Copies of the complete assessments are available for public inspection** at the Public Works/Water counter located on the first floor of Victorville City Hall, by contacting Arnold Villarreal, Water Manager, at (760) 245-6424, or at the State Water Resources Control Board Division of Drinking Water, SWRCB-DDW, San Bernardino District Office located at 464 West Fourth Street, Suite 437, San Bernardino, CA. 92401.

# VICTORVILLE WATER DISTRICT: RESULTS OF 2022 DRINKING-WATER-QUALITY TESTS

The District tests for hundreds of substances. The tables on these pages list substances detected in your drinking water in 2022. As the charts show, very few substances could even be detected.

Inorganic Contaminants								
	VVWD Average	VVWD Range	MCL	PHG (MCLG)	Violation	Major Sources in Drinking Water		
Arsenic* (ppb)	8.2	0-22	10	0.004	NO	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes		
Total Chromium (ppb)	0.0	0-0	50	100	NO	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits		
Chromium 6 (ppb)	5.2	0-11	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)	0.97	0-3	10	10	NO	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Disinfection Byproducts			1	1	l			
	VVWD Average	VVWD Range	MCL	PHG (MCLG)	Violation	Major Sources in	n Drinking Water	
Total Trihalomethanes (TTHMs) (ppb)	6.4	0 – 27	80	n/a	No	By-product of drinking water chlorination		
Total Haloacetic Acid (HAA5) (ppb)	0	0-0	60	n/a	No	By-product of drinking water chlorination		
Disinfectants								
	VVWD Average	VVWD Range	MRDL	MRDLG	Violation	Major Sources in Drinking Water		
Chlorine (ppm)	0.75	.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) (ppb)	34	none	N/D	N/D	0	0	Customer Household Plumbing	
Copper (total) (ppb)	34	none	N/D	N/D	0	0	Customer Household Plumbing	
Regulated Contaminants with Seco	ndary MCLs							
	VVWD Average	VVWD Range	Secondary MCL	Violation	Typical Source of Contaminant			
Chloride (ppm)	8.4	2-43	500		Runoff/leaching from natural deposits; seawater influence			
Specific Conductance (Micromhos)	253.28	170 – 420	1600		Substances that form ions when in water; seawater influence			
Sulfate (ppm)	21.6	2 – 140	500		Runoff/leaching from natural deposits; industrial wastes			
Total Dissolved Solids (ppm)	157	100 - 310	1000		Runoff/leaching from natural deposits			
Turbidity (NTU)	<1	0 – 1	5		Soil runoff			
Unregulated Parameters That May I	oe of Interest to C	onsumers	1	<u></u>				
	VVWD Average	VVWD Range	MCL	PHG (MCLG)	Notification Level			
Alkalinity (ppm)	88.7	54 – 140	N/S	N/S				
Calcium (ppm)	10.0	0 - 50	N/S	N/S				
Hardness (ppm)	28.1	0-160	N/S	N/S				
Magnesium (ppm)	0.80	0-8	N/S	N/S				
Potassium (ppm)	0.9	0-3	N/S	N/S				
рН	8.7	7.6 – 9.4	N/S	N/S				
Sodium (ppm)	41.8	0-74	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 Positive	0	Naturally present in the Environment	
Fecal Coliform 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	

\*While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. 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.

# **2022 – IMPORTED WATER FROM 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 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	0.23 - 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) (NO3-N)	0.51	0.46 - 0.62	10	10	2022	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	0.46 - 0.62	10	10	2022	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	<10-1.2	20	0.43	2022	NO	Erosion of natural deposits
Radium 226 + 228 (pCi/L)	<1.0	<1.0-4.3	5	0	2022	NO	Erosion of natural deposits

\* Note: The Agency is committed to providing safe, potable drinking water and performs additional water quality sampling for various constituents. In 2022, the sampling of Radium 226+228 was performed on all wells. In performing additional water quality sampling, one well had a Radium 228 result of 4.3 pCi/L. Although the result was below the MCL and in compliance with State and Federal regulations, the Agency took precautionary measures and performed two additional quarterly samples for Radium 226+228. The Agency is pleased to report the two additional quarterly samples were below the detection limit and therefore considered Non-Detect for Radium 226+228. All other wells were well below the MCL.

Disinfectant Byproducts					Sample results	s are from the di	stribution system from Wells 1,2,3,4, & 5	
Haloacetic Acids (ug/L) (HAA5)	<1.0	<1.0-1.2	60	N/A	2022	N0	Byproduct of drinking water disinfection	
Total Trihalomethanes (ug/L) (TTHM)	8.2	<1.0 - 16.6	80	N/A	2022	NO	Byproduct of drinking water disinfection	
Regulated Contaminants with Seco	ndary Maximum	Contaminant Le	evels			1	Wells 1,2,3,4, & 5	
Contaminants	Average	Sample Range	Secondary MCL	Sample Date	Violation	Major Sources ir	n Drinking Water	
Chloride (mg/L)	24	19 – 29	500	2022	NO	Runoff/leaching	from natural deposits; seawater influence	
Foaming Agents (ug/L) (MBAS)	<100	<100 - 100	500	2022	NO	Municipal and in	ndustrial wastes discharges	
Odor (units)	1	1	3	2022	NO	Naturally occurr	ing organic materials	
Specific Conductance (µS/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 Residual					Sample results	s are from the di	stribution system from Wells 1,2,3,4, & 5	
Constituent	Average	Sample Range	MCL	PHG(MCLG)	Sample Date	Major Sources ir	n Drinking Water	
Chlorine (mg/L)	0.54	0.24 - 0.94	4	4	Weekly	Drinking water of	disinfectant added for treatment	
Constituents that may be of interes	t to consumers						Wells 1,2,3,4, & 5	
Contaminants	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				
рН	7.3	71 – 77	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)	15.4	15 – 16	2022	No PHG or MCL's available				
Total Alkalinity (as CaCO3) (mg/L)	67	66 – 71	2022	No PHG or MCL's available				
Total Hardness (as CaCO3) (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				

#### ABBREVIATIONS AND DEFINITIONS TO HELP YOU UNDERSTAND THIS REPORT

These abbreviations and definitions of water-quality goals and standards will help you better understand the water-quality information in this report. The information shows how your water compares to requirements established by state and federal regulators to safeguard public health.

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.

**mg/L:** For the definition, see PPM to the right.

Maximum Residual Disinfectant Level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

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.

Micromhos per cm (uS/cm): A measure of conductivity.

N/A: Not applicable.

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

N/S: No Standard.

ND: Not Detected.

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

NTU: Nephelometric turbidity unit.

pCi/L: Pico curies per liter, a measure of radiation.

Primary Drinking Water Standard (PDWS): MCL's and MRDL's 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.

PPB or ug/L: Parts per billion, or micrograms per liter. 1 PPB is equal to about one drop in 17,000 gallons of water.

PPM (parts per million), or mg/L (milligrams per liter): 1 PPM or 1 mg/L is equal to about one drop in 17 gallons of water.

**Regulatory Action Level:** The concentration of a contaminant which, 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 accentable.

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

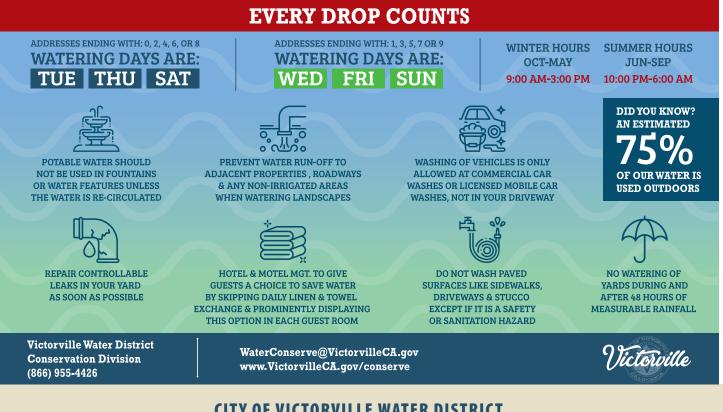
ug/L: micrograms per liter or parts per billion (ppb).

**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.

**µS/cm:** a measure of conductance.

<: Less than the detection limit.

Radon is an unregulated chemical, therefore, there are no State drinking water standards for radon in California. Radon was detected at Wells 2-5 during the initial sampling in 2010 with results ranging from 479-589 pCi/L and an average of 546 pCi/L. All wells were below the U.S. EPA MCL advisory level of 4,000 pCi/L. Radon is a radioactive gas that you cannot see, taste, or smell, and is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in a home. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon levels in your home, you can test the air. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. For additional information, contact the radon program via email at radonprogram@cdph.ca.gov or by calling 1-800-745-7236. You can also contact the U.S. EPA Safe Drinking Water Act Hotline at 1-800-426-4791 or the National Safety Council Radon Hotline, 1-800-557-2366.



#### CITY OF VICTORVILLE WATER DISTRICT

14343 Civic Drive, Victorville, CA 92392-5887 • 760-955-5000 General Information • www.VictorvilleCA.gov

#### How to Get Involved

Board of Director meetings are always open to the public. They are held at the Victorville City Hall Council Chambers, located at 14343 Civic Drive in Victorville, California on the first and third Tuesdays of each month at 6:00 p.m.

#### **Please Call With Your Questions**

For more information about your water guality, call Arnold Villarreal at 760-245-6424 between 8:00 a.m. and 5:00 p.m. Monday through Thursday or Friday between 8:00 a.m. and 4:00 p.m.

#### En Español

Este informe contiene información muy importante sobre la calidad de su agua potable. Si usted no comprende esta información, por favor pida a alguien que se la traduzca o llámenos al 760-245-6424.