

# WATER QUALITY REPORT

DELIVERED JUNE 2023 (Based on 2022 data)







# A LETTER FROM OUR GENERAL MANAGER



# Finding Solutions for Safe, Reliable Water

Thanks to cool and wet weather across the state, California has the water needed to end the most recent extreme drought. This year because of the abundant rainfall, Desert Water Agency (DWA) will receive water to replenish our groundwater basin for dry years ahead.

While this much needed reprieve is definitely a plus, we still need to avoid being wasteful, protect local water sources and save water for future generations. DWA offers a variety of incentives to help customers be water wise. We are adding new programs this summer, so check our website to see if there is a new way for you to step up and save.

While conservation is always important, it is only a fraction of what we're tasked with at DWA. Providing you with safe and reliable water around the clock is central.

Our team is a key part of the equation for safe, reliable water. Without our experts who run and maintain the system (and plan for its future), we wouldn't have the convenient access to water. We run thousands of tests a year to make sure the water is safe to use and drink.

Equally important to our success is the health of our system. We have wells, reservoirs, pumping stations, pipelines, meters and a laboratory. DWA is proactively replacing old pipelines to keep our system safe and efficient.

While there is no formula to providing water safely and reliably, I'm proud of our team's work and dedication to getting it done.

We are pleased to share the results of this year's water quality report. Please don't hesitate to reach out to our team if you have any questions on this report or anything else water related.

Yours in service,

MARK S. KRAUSE

General Manager & Chief Engineer



Mark S. Krause



# **OUR WATER SUPPLY**

### **DESERT WATER AGENCY**

Established in 1961, Desert Water Agency (DWA) is a public nonprofit agency and State Water Contractor managing water in a 325-square-mile area that includes parts of Cathedral City, Palm Springs, and Desert Hot Springs, as well as some unincorporated areas of Riverside County. The Agency's responsibility is to provide safe, reliable water to its retail customers while managing water resources throughout its boundary. DWA is guided by an elected board of five community members. Board members make policy decisions as public representatives.

### **WATER SOURCES**

Desert Water Agency's groundwater comes from the Indio Subbasin of the Coachella Valley Groundwater Basin, a natural reservoir storing water beneath the valley floor. Mountain streams also bring water by way of Chino Creek, Falls Creek, Snow Creek and the Whitewater River. A new surface water filtration plant came online in late 2020 to filter Snow Creek and Falls Creek surface water. Chino Creek operates in accordance with filtration avoidance criteria.

Natural groundwater replenishment is supplemented with Colorado River water, imported via the Colorado River Aqueduct and infiltrated into the groundwater basin through recharge ponds near Windy Point.

### WATER QUALITY MONITORING

Unless otherwise noted, data presented in this report was obtained between January 1, 2022, and December 31, 2022. Water quality monitoring was performed in accordance with regulations established by the State Water Resources Control Board (SWRCB) Division of Drinking Water and the U.S. Environmental Protection Agency (EPA).

In some cases, the SWRCB allows DWA to test for certain contaminants less than once a year, because the Agency's system is not susceptible to these contaminants, or because the levels recorded are expected to change little from year to year.

# WATER SOURCE INFORMATION

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.



### SOURCE WATER ASSESSMENT

- Source Water Assessment Plans (SWAPs), last updated 2000-2014, for various sources, are available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. It also includes an inventory of potential sources of contamination within the delineated area and a determination of the water supply's susceptibility to contamination by the identified potential sources.
- These sources are considered vulnerable to activities normally associated with residential, commercial and industrial development. However, all water provided by Desert Water Agency meets all U.S. EPA and SWRCB guidelines. To review the SWAPs, please contact our office during regular business hours.

Questions? For more information about this report, or for any questions relating to your drinking water, please call Paul Monroy, Laboratory Director, at **(760) 323-4971.** 

# **GLOSSARY**

**Action Level (AL):** The level at which the system must undertake a number of additional actions to control corrosion.

Aggressive Index: A calculation used to determine the corrosivity of water in our pipes. Numbers ≤ 10 are considered very aggressive, between 10-12 are moderately aggressive and ≥12 are non-aggressive.

**Locational Running Annual Average (LRAA):** The average of sample analytical results for samples taken during the previous four calendar quarters.

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. MCLG's are set by the U.S. Environmental Protection Agency.

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.

#### Microsiemens Per Centimeter (µS/cm):

A measurement of the electrolytes in the water, which determines the ability of the water to conduct electrical current.

 $\label{eq:micrograms} \begin{tabular}{ll} \b$ 

**Milligrams Per Liter (mg/L):** A measure of a contaminant in a known quantity of water. 1 mg/L equals 1 part per million (see parts per million).

NA: Not applicable.

Nanograms per Liter (ng/L): A measurement of a contaminant in a known quantity of water. 1ng/L equals 1 part per trillion. (see parts per trillion).

**ND:** Not detected or below the reporting detection limit

Nephelometric Turbidity Units (NTU): A measure of cloudiness due to undissolved solids in the water. We measure turbidity because it is a good indication of the effectiveness of our filtration system and/or water quality.

# **SAMPLING RESULTS**

During the past year we have taken more than 2,550 water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. **The tables below show those contaminants that were detected in the water.** The State allows us to monitor for certain substances less often than once per year because the concentrations of these substances do not change frequently. Some of our data, although representative, are more than one year old. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

	Substance	Unit of Measure	MCL (MRDL)	PHG (MCLG) [MRDLG]	Groundwater Source			Surface Water Source			Violation		
					Year Sampled	Amount Detected	Range (Low-High)		Amount Detect- ed		Yes	No	Likely source of contamination
	Chlorine	mg/L	[4.0 as Cl2]	[4 as Cl2]	2022	0.45	0-2.2	2022	0.78	ND-3.0		Х	Drinking water disinfectant added to treatment
	Fluoride	mg/L	2.0	1	2020-2022	0.41	ND-0.60	2022	ND	ND		x	Erosion of natural deposits: discharge from fertilizer and aluminum factories
	Gross Alpha Particle Activity	pCi/L	15	0	2014-2022	8	ND- <b>24***</b>	2019 - 2022	5.3	3.8 - 6.7		х	Erosion of natural deposits
	Haloacetic Acids (HAA5)*	ug/L	60	NONE	2022	ND	ND	2022	28 <b>²</b>	21-28		х	By-product of drinking water disinfection
	Nitrate (as N)	mg/L	10	10	2022	0.83	0.3-2.6	2022	ND	ND		x	Runoff/leaching from fertilizer use: leaching from septic tanks and sewage; erosion of natural deposit
	Tetrachloroethylene (PCE)	ug/L	5	0.06	2019-2022	ND	ND-0.85 <sup>3</sup>	2016	ND	ND		x	Runoff/leaching from natural deposit
	Total Trihalomethanes (TTHM)*	ug/L	80	NONE	2022	7.3 <sup>2</sup>	ND-16	2022	56²	33-56		х	By-product of drinking water disinfection
	Turbidity	NTU	5	NONE	2020-2022	0.13	ND-0.24	2022	0.31	0.22-0.40		х	Soil runoff
	Surface Water Turbidity⁴	NTU	TT=1	NONE	NA	NA	NA	2022	0.25	ND-0.25		Х	Soil runoff
	Surface Water Turbidity <sup>9</sup>	NTU	TT= 95% of samples < 0.2 NTU	NONE	NA	NA	NA	2022	98.0%	98.0-100%		x	Soil runoff
	Uranium	pCi/L	20	0.43	2014-2022	6.6	2.75-15.9	2019	4.9	4.9		x	Erosion of natural deposits

#### Tap water samples were collected for lead and copper analysis from sample sites throughout the community.

Distribution System

	Unit of Measure	AL	PHG	Distribution System					Violation		
Substance				Year Sampled	Amount Detected (90th Percentile)	Sites Abov AL/Total Samples	ve Number of Schools Sampled	School samples above AL/Total Samples	Yes	No	Likely source of contamination
Copper	mg/L	1.3	0.3	2021	0.22 0/30		NA	NA		Х	Internal corrosion of household/business water plumbing systems; discharges from industrual manufacturers; erosion of natural deposits
Lead	ug/L	15	0.2	2021	ND	2**/30	0	0		Х	Internal corrosion of household/business water plumbing systems; discharges from industrual manufacturers; erosion of natural deposits
	MCL							Total # of	Violation		
Substance			MCLG	Highest % pos samples in any r		otal # of routine positive samples	repeat <sup>5</sup> positive samples	Yes	No	Likely source of contamination	
Total Coliform Bacteria (State Total Coliform Rule)	5.0% of monthly samples are positive		0	1.0%		2	0		x	Naturally present in the environment	
Fecal Coliform and E. coli (State Total Coliform Rule)	See Footnote 6		0	0		0	0		x	Human and animal fecal waste	
E. coli (Federal Revised Total Coliform Rule			0	0		0	0		x	Human and animal fecal waste	

Violation

Notification Level (NL): Health-based advisory levels established by the State for chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

Parts Per Billion (PPB): One part per billion corresponds to one minute in 2,000 years or one penny in \$10,000,000 (Ten million dollars).

Parts Per Million (PPM): One part per million corresponds to one minute in two years or one penny in \$10,000 (Ten thousand dollars).

**pH:** An expression of the intensity of the basic or acid condition of a liquid. The pH may range from 0 to 14, where 0 is most acidic, 14 most basic and 7 neutral.

PicoCuries per Liter (pCi/L): A measure of the radioactivity in the water.

**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. 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, such as public notification, that a water system must follow.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

**UCMR:** Unregulated Contaminant Monitoring Rule

Variances and Exemptions: SWRCB permission to exceed an MCL or not comply with a treatment technique under certain conditions.

< Means "less than": For example < 0.2 means the lowest detectable levels is 0.2 and that the contaminant was less than 0.2 and therefore not detected.

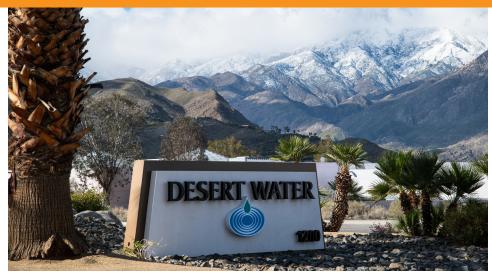
- \* This number is not the average annual amount.
- \*\* Levels found in rarely used customer faucet, but not in primary fixtures or DWA distribution line.
- \*\*\* Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting
- 1. DWA does not add fluoride to drinking water.
- 2. Highest LRAA for 2022.
- 3. Of 22 wellheads in the system, 21 tested nondetect.
- 4. Turbidity is regulated as a TT for filtration avoidance and filtration treatment. TT=1 is a requirement for both filtration avoidance and filtration treatment. TT=95% of samples < 0.2 NTU is for filtration treatment only.
- 5. These repeat sample results validate no violation occurred.
- **6.** If a routine and repeat sample are total coliform-positive and either is E. coli positive, or system fails to take repeat samples following E. coli-positive routine sample or a system fails to analyze total coliform positive repeat sample for E. coli, then a violation occurs.
- 7. If a routine sample is E. Coli positive and a repeat sample is total coliform positive, then a violation has occurred.
- 8. Currently pending approval for regulatory limits.
- 9. Surface water provided by Snow Creek Filtration Plant.

	Substance	Unit of Measure	MCL (MRDL)	PHG (MCLG) [MRDLG]	Groundwater Source			Surface Water Source			Violation		
CES					Year Sampled	Amount Detected	Range (Low- High)	Year Sam- pled	Amount Detect- ed	Range (Low- High)	Yes	No	Likely source of contamination
SECONDARY SUBSTANCES	Chloride	mg/L	500	NONE	2020-2022	50	13-92	2022	1.6	1.2-1.9		x	Runoff/leaching from natural deposit; seawater influence
	Color	Units	15	NONE	2020-2022	ND	ND	2022	ND	ND		х	Naturally occurring organic materials
	Odor-Theshold	TON	3	NONE	2020-2022	1	1-2	2022	1	1		х	Naturally occurring organic materials
	Specific Conductance	uS/cm	1600	NONE	2020-2022	580	280-890	2022	170	100-240		x	Substance that form ions when in water; seawater influence
	Sulfate	mg/L	500	45	2020-2022	120	29-230	2022	4.4	1.2-7.6		х	Runoff/leaching from natural deposits; industrial wastes
	Total Dissolved Solids	mg/L	1000	NONE	2020-2022	390	180-600	2022	110	73-150		х	Runoff/leaching from natural deposits
	Aggressive Index	Al	Non-ag- gressive	NONE	2020-2022	12.4	12-12.5	2021	10.7	10.7		х	Influenced by hydrogen, carbon, oxygen and temperature
	Alkalinity	mg/L	NONE	NONE	2020-2022	140	110-170	2022	96	62-130		X	Function of carbonate, hydroxide and bicarbonate; naturally occuring
CES	Bicarbonate	mg/L	NONE	NONE	2020-2022	140	110-170	2022	96	62-130		х	Naturally occurring
BSTANCE	Barium	mg/L	1	2	2020-2022	0.043	ND-0.10	2022	0.054	0.039-0.069		Х	Naturally occurring
OTHER SUB	Calcium	mg/L	NONE	NONE	2020-2022	72	30-100	2022	22	12-32		х	Contributes to water hardness; naturally occurring
OTH	Hexavalent Chromium <sup>8</sup>	ug/L	NONE	NONE	2013-2018	1.3	ND-3.9	NA	NA	NA		Х	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
	Hardness	mg/L	NONE	NONE	2020-2022	230	88-320	2022	67	35-98		x	Naturally occurring
	Iron	ug/L	300	None	2020-2022	ND	ND-75	2022	130	ND-130		Х	Leaching from natural deposits; industrial wastes
	Magnesium	mg/L	NONE	NONE	2020-2022	13	3.4-20	2022	2	1.0-2.9		х	Contributes to water hardness; naturally occurring
	Potassium	mg/L	NONE	NONE	2020-2022	4.1	3.3-6.6	2022	4.3	2.3-6.2		х	Leaching from water softeners, fertilizers and natural deposits
	рН	pH Unit	NONE	NONE	2020-2022	8	7.8-8.2	2022	7.7	7.5-7.9		х	Naturally occurring
	Sodium	mg/L	NONE	NONE	2020-2022	39	22-77	2022	11	9.4-13		х	Naturally occurring

Effective April 1, 2016, all water systems are required to comply with the state Total Coliform Rule and the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (total coliform and E. coli bacteria). U.S. EPA anticipates greater public health protection as the new rule requires water systems vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to do an assessment to determine if any sanitary defects exist. If found, the water system must take corrective action.

# **HEALTH INFORMATION**

### PFAS & MICROPLASTICS: WHAT TO KNOW



Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

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. Desert Water Agency is responsible for providing high-quality drinking water but cannot control the variety of materials used in your property's plumbing. 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 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 or at http://www.epa.gov/safewater/lead.



Desert Water Agency is continually monitoring our water system, performing thousands of tests per year to make sure the drinking water we deliver to customers meets all public health standards.

California has the most stringent water standards in the nation, and it's because we seek the highest water quality possible. This is why we test for potential contaminants like polyfluoroalkyl (PFAS) substances, and the State is currently considering the regulation of microplastics in our surface waters.

The EPA started regulating PFAS in 2009, and has since been in charge of setting the standards for its reporting. Polyfluoroalkyl substances are manufactured chemicals that exist in sources like household products, dust, foods, and can end up contaminating water. DWA has been in compliance with the required PFAS levels, and continues to follow all required guidlines.

Also, regulations for microplastics are currently underway. Research is currently being done to understand how to best sample and mitigate contamination.

As California explores this new frontier in drinking water standards, DWA will continue to prioritize safe and reliable drinking water for its community.

# **COMMON WATER QUALITY QUESTIONS**

### WHY DOES TAP WATER SOMETIMES SMELL FUNNY?

When your water tastes or smells funny, the problem may or may not be in the water. Often times odors might actually be coming from your sink drain, where bacteria grow on hair, soap, food, and other things that get trapped. This produces odorous gasses that get stirred up when water pours into the drain. Similar smells can also come from bacteria growing on devices such as water heaters.

A slight smell or taste of chlorine in your water is also normal. A small amount of chlorine is required, and added to water in order to meet drinking water regulations. Chlorine is a disinfectant used to provide continuous protection against any possible microbial contamination. Regulations limit the amount of chlorine added to tap water, so that the water is safe to drink.

When sulfate is present in the water supply, a sulfur or rotten egg smell may develop. Improperly maintained water heaters or lack of water circulation within a residence during warmer months are circumstances that may contribute to this odor.

#### WHY DOES MY WATER LOOK CLOUDY?

Occasionally, tiny air bubbles in tap water cause a cloudy appearance. Air dissolves into water when pressurized, which occurs in the groundwater basin and in the water pipes that deliver water to your tap. These bubbles dissipate after a few moments in a glass.



#### IS FLUORIDE ADDED TO THE WATER?

Desert Water Agency does not add fluoride to its water, because there are naturally occurring levels. Fluoride levels are regulated, and the State of California currently has a maximum contamination level (MCL) of 2.0 ppm for drinking water. In comparison, our average fluoride level of 0.4 ppm is 5 times below the MCL required by the State.



### **REGULATORY INFORMATION**

#### CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

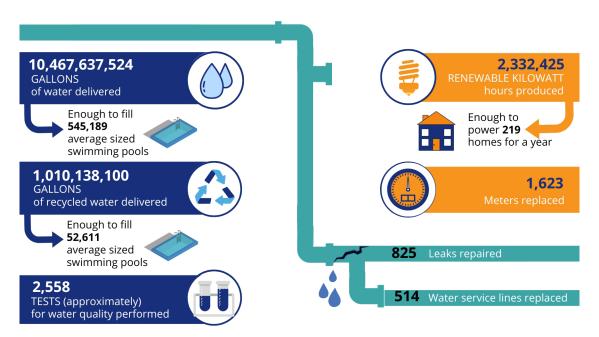
- **Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides,** which 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 by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, which 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. 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.

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 is available through the U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

# **DESERT WATER AGENCY 2022 YEAR AT A GLANCE**



### **Your Water Quality**

Desert Water Agency is committed to serving healthy, safe drinking water and to keeping you informed about the quality of the water that is delivered to your tap. Our team samples water daily to ensure it meets strict standards. As fluctuating conditions in California continue to affect water supply, it is important for us to support our customers and work together to protect this precious local resource.

By explaining the sources of our water and defining the exact constituents in the water, this report is our way of providing clear, transparent information to our customers. The board and staff take their responsibility to provide high-quality water very seriously and we're proud to report that our water meets and exceeds the strictest standards in the nation. If you have any questions when reviewing this report, please contact Paul Monroy, Laboratory Director, at (760) 323-4971.

# **BOARD OF DIRECTORS**

Board Meetings are held the first and third Tuesdays of each month at 8 a.m.

PAUL ORTEGA President Division 4 JEFF BOWMAN Vice President Division 3

GERALD McKENNA
Secretary - Treasurer
Division 2

STEVE GRASHA Director Division 1

Director
Division 5

**DESERT WATER** 



1200 Gene Autry Trail South, Palm Springs, CA 92264 | (760) 323-4971 www.dwa.org

