



WATER QUALITY REPORT

DELIVERED JUNE 2019

DESERT WATER





THE WAVE OF THE FUTURE

There are so many forces changing the way public water agencies serve their communities. Technology is advancing by leaps and bounds – changing everything from water well operations to backyard irrigation. Regulations are shaping almost every facet of our operations. People want to be more engaged than ever before. We're committed to keeping up with the tides of change while affordably delivering water.

Desert Water Agency provides our customers with high quality water and customer service today, while also planning for a sustainable, reliable future. It is our responsibility and privilege to work with individuals and organizations throughout the region to this end. There is a lot that goes on behind the scenes to make it happen.

We have a team of 85 dedicated public employees with various specialties that make what we do possible. If you've had a chance to interact with any of them, you'll understand why I am so proud of our team and the work we accomplish. Delivering water through a network of pipelines more than 400 miles long is pretty incredible, especially when you consider we must ensure it meets some of the world's strictest standards.

This report is part of our commitment to water quality and transparency. I hope you find it helpful, and reassuring. Throughout the document, you'll find information about water sources, the delivery system and results of thousands of tests performed in 2018 to ensure the safety of your water. You can drink, cook with and use tap water without worry.

If you have questions about the report or our testing, please don't hesitate to reach out to our Lab Director, Paul Monroy. We welcomed Paul to the team in 2018. His 18 years of experience at private laboratories is helping move our processes and reporting into the future. If you'd like to see him – and our other employees – in action, sign up for one of our tours. We'd love to show you what we do.

Thank you for taking the time to review this report.

Yours in service,

Mark S. Krause

MARK S. KRAUSE
General Manager & Chief Engineer



DESERT WATER AGENCY

Established in 1961, Desert Water Agency (DWA) is a public nonprofit agency and State Water Contractor serving residents and visitors 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 a safe, reliable water supply to its retail customers while protecting its interests in the State Water Project. DWA is guided by an elected board of five community members. Board members make guiding policy decisions as public representatives.

OUR WATER SUPPLY

Water is a precious and limited resource; only about .007 percent of the water found on Earth is readily accessible to treat for drinking.

WATER SOURCES

Desert Water Agency's groundwater comes from the Whitewater River Sub-basin 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 and Snow Creek. DWA operates these three surface sources in accordance with filtration avoidance criteria.

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

WATER QUALITY MONITORING

Unless otherwise noted, data presented in this report was obtained between January 1, 2018, and December 31, 2018. Water quality monitoring was performed in accordance with regulations established by the State Water Resources Control Board Division of Drinking Water and the U.S. Environmental Protection Agency.

In some cases, the State Water Resources Control Board 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 vary 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

- A Source Water Assessment Plan (SWAP), last updated in 2014, is 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 SWAP, 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 ext. 169.

GLOSSARY

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.

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. MRDLGs are set by the U.S. Environmental Protection Agency.

Microsiemens Per Centimeter (µS/cm):

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

Micrograms Per Liter (µg/L): A measure of a contaminant in a known quantity of water. 1 µg/L equals 1 part per billion (see parts per billion).

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. 1 ng/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.

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).

SAMPLING RESULTS

During the past year we have taken more than 2,000 water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. **The tables below show only 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			Distribution System			Violation		Likely source of contamination
				Year Sampled	Amount Detected	Range (Low-High)	Year Sampled	Amount Detected	Range (Low-High)	Year Sampled	Amount Detected	Range (Low-High)	Yes	No	
Chlorine	mg/L	(4.0 as Cl ₂)	(4.0 as Cl ₂)	NA	NA	NA	NA	NA	NA	2018	0.38	ND-1.34		★	Drinking water disinfectant added for treatment
Fluoride	mg/L	2.0	1	2017-2018	0.36	ND-0.70	2018	ND	ND	NA	NA	NA		★	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum
Gross Alpha Particle Activity	pCi/L	15	0	2012-2017	3.7	ND-7.9	2013-2016	2.1	ND-6.4	NA	NA	NA		★	Erosion of natural deposits
Haloacetic Acids (HAA5)*	ug/L	60	NONE	NA	NA	NA	NA	NA	NA	2018	5.8 ¹	ND-21		★	By-product of drinking water disinfection
Nitrate (as N)	mg/L	10	10	2018	1.4	0.44-4.4	2018	ND	ND	NA	NA	NA		★	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene (PCE)	ug/L	5	0.06	2013-2018	ND	ND-0.63 ²	NA	NA	NA	NA	NA	NA		★	Runoff/leaching from natural deposits
Total Trihalomethanes (TTHM) *	ug/L	80	NONE	2018	ND	ND	2016	ND	ND	2018	19.3 ¹	ND-25.5	★ ³		By-product of drinking water disinfection
Turbidity ⁴	NTU	5	NONE	2018	0.13	ND-0.30	2018	1.1	0.1-1.1	2018	0.07	ND-0.28		★	Soil runoff
Uranium	pCi/L	20	0.43	2004-2018	5.4	2.5-8.7	2016	8.0	No Range	NA	NA	NA		★	Erosion of natural deposits
Tap water samples were collected for lead and copper analyses from sample sites throughout the community.															
Substance	Unit of Measure	AL	PHG	Distribution System			Number of schools sampled	School samples above AL/Total Samples	Violation		Likely source of contamination				
				Year Sampled	Amount Detected (90th Percentile)	Sites Above AL/Total Sites			Yes	No					
Copper	mg/L	1.3	0.3	2018	0.13	0/30	NA	NA		★	Internal corrosion of household/business water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits				
Lead	ug/L	15	0.2	2018	0	0/30	2	0/6		★	Internal corrosion of household/business water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits				
Substance	MCL	MCLG	Highest % positive samples in any month	Total # of routine positive samples	Total # of repeat ⁵ positive samples	Violation		Likely source of contamination							
						Yes	No								
Total Coliform Bacteria (State Total Coliform Rule)	5.0% of monthly samples are positive	0	1.2	3	0		★	Naturally present in the environment							
Fecal Coliform and <i>E. coli</i> (State Total Coliform Rule)	See Footnote 6	0	0	0	0		★	Human and animal fecal waste							
<i>E. coli</i> (Federal Revised Total Coliform Rule)	See Footnote 7	0	0	0	0		★	Human and animal fecal waste							

REGULATED SUBSTANCES

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

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

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

UCMR: Unregulated Contaminant Monitoring Rule

Variations 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.

> Means "greater than": For example >0.1 means any sample tested having a value greater than 0.1.

* This number is not the average annual amount detected, but the highest quarterly average.

- Highest LRAA for 2018.
- Of 22 wellheads in the system, 21 tested nondetect.
- We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During calendar year 2018, we did not monitor for TTHMs in the water supplied during the first quarter of the year and therefore, cannot be sure of the quality of your drinking water during that time. We have since taken required samples which do meet water standards.
- Turbidity is regulated as a TT for the surface sources (as a condition for filtration avoidance) and is a measure of the cloudiness of the water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
- These repeat sample results validate no violation occurred.
- 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.
- If a routine sample is fecal coliform positive and a repeat sample is total coliform positive, then a violation has occurred.
- The MCL of 10 ppb was withdrawn on 9/11/17. Hexavalent Chromium is presently regulated under the Total Chromium MCL of 50 ppb.

Substance	Unit of Measure	MCL (MRDL)	PHG (MCLG) [MRDLG]	Groundwater Source			Surface Water Source			Distribution System			Violation		Likely source of contamination
				Year Sampled	Amount Detected	Range (Low-High)	Year Sampled	Amount Detected	Range (Low-High)	Year Sampled	Amount Detected	Range (Low-High)	Yes	No	
Chloride	mg/L	500	NONE	2017-2018	35	6.1-91	2018	1.8	1.3-2.2	NA	NA	NA		★	Runoff/leaching from natural deposits; seawater influence
Color	Units	15	NONE	2017-2018	ND	ND	2018	5.8	5.0-7.5	2018	0.7	ND-0.7		★	Naturally occurring organic materials
Odor-Threshold	TON	3	NONE	2017-2018	1	NA	2018	1	NA	2018	1	1-2		★	Naturally occurring organic materials
Specific Conductance	uS/cm	1600	NONE	2017-2018	570	270-960	2018	160	110-240	NA	NA	NA		★	Substances that form ions when in water; seawater influence
Sulfate	mg/L	500	45	2017-2018	110	20-240	2018	3.0	1.3-6.2	NA	NA	NA		★	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	mg/L	1000	NONE	2017-2018	370	160-600	2018	110	65-180	NA	NA	NA		★	Runoff/leaching from natural deposits
Aggressive Index	AI	Non-aggressive	NONE	2017-2018	12.3	11.6-12.6	2018	11.5	11.3-11.9	NA	NA	NA		★	Influenced by hydrogen, carbon, oxygen and temperature
Alkalinity	mg/L	NONE	NONE	2017-2018	130	110-190	2018	76	58-110	NA	NA	NA		★	Function of carbonate, hydroxide and bicarbonate; naturally occurring
Bicarbonate	mg/L	NONE	NONE	2017-2018	160	130-230	2018	94	70-140	NA	NA	NA		★	Naturally occurring
Calcium	mg/L	NONE	NONE	2017-2018	70	24-110	2018	21	12-34	NA	NA	NA		★	Contributes to water hardness; naturally occurring
Hardness	mg/L	NONE	NONE	2017-2018	220	72-360	2018	57	30-96	NA	NA	NA		★	Naturally occurring
Magnesium	mg/L	NONE	NONE	2017-2018	13	1.9-22	2018	1.4	1.3-2.9	NA	NA	NA		★	Contributes to water hardness; naturally occurring
Potassium	mg/L	NONE	NONE	2017-2018	4.4	2.5-8.8	2018	3.3	1.8-5.5	NA	NA	NA		★	Leaching from water softeners, fertilizers and natural deposits
pH	pH Unit	NONE	NONE	2017-2018	7.9	7.6-8.1	2018	8.0	7.9-8.0	2018	7.9	7.4-8.7		★	Naturally occurring
Sodium	mg/L	NONE	NONE	2017-2018	35	17-72	2018	11	9.6-13	NA	NA	NA		★	Naturally occurring
Substance	Unit of Measure	Notification Level	Groundwater Source			Surface Water Source			Distribution System			Violation		Likely source of contamination	
			Year Sampled	Amount Detected	Range (Low-High)	Year Sampled	Amount Detected	Range (Low-High)	Year Sampled	Amount Detected	Range (Low-High)	Yes	No		
Boron	ug/L	1000	2017-2018	6.5	ND-120	2018	ND	ND	NA	NA	NA		★	Naturally occurring	
Chlorate	ug/L	800	2014	64	22-380	NA	NA	NA	NA	NA	NA		★	Erosion of natural deposits	
Hexavalent Chromium ⁸	ug/L	50	2017-2018	1.9	ND-4.7	2018	ND	ND	NA	NA	NA		★	Naturally occurring	
Molybdenum	ug/L	NONE	2014	4.7	3.4-13	NA	NA	NA	NA	NA	NA		★	Naturally occurring	
Strontium	ug/L	NONE	2014	250	70-450	NA	NA	NA	NA	NA	NA		★	Naturally occurring	
Vanadium	ug/L	50	2017-2018	8.1	3.4-17	2018	2.4	ND-3.6	NA	NA	NA		★	Erosion of natural deposits	

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.

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. Odors might actually be coming from your sink drain, where bacteria grow on hair, soap, food, and other things that get trapped. Odorous gases get stirred up when water pours into the drain. Odor can also come from bacteria growing on devices such as water heaters.

WHY DOES TAP WATER HAVE A FAINT CHLORINE SMELL?

A small amount of chlorine is added to meet drinking water regulations. It is a disinfectant used to provide continuous protection against possible microbial contamination. Regulations limit the amount of chlorine added to tap water so that the water is safe to drink. A slight smell or taste of chlorine is normal.

WHY DOES MY WATER HAVE A ROTTEN EGG OR SULFUR SMELL?

This smell can occur under some conditions when sulfate is present in the water supply. 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.



DO I NEED A SOFTENER?

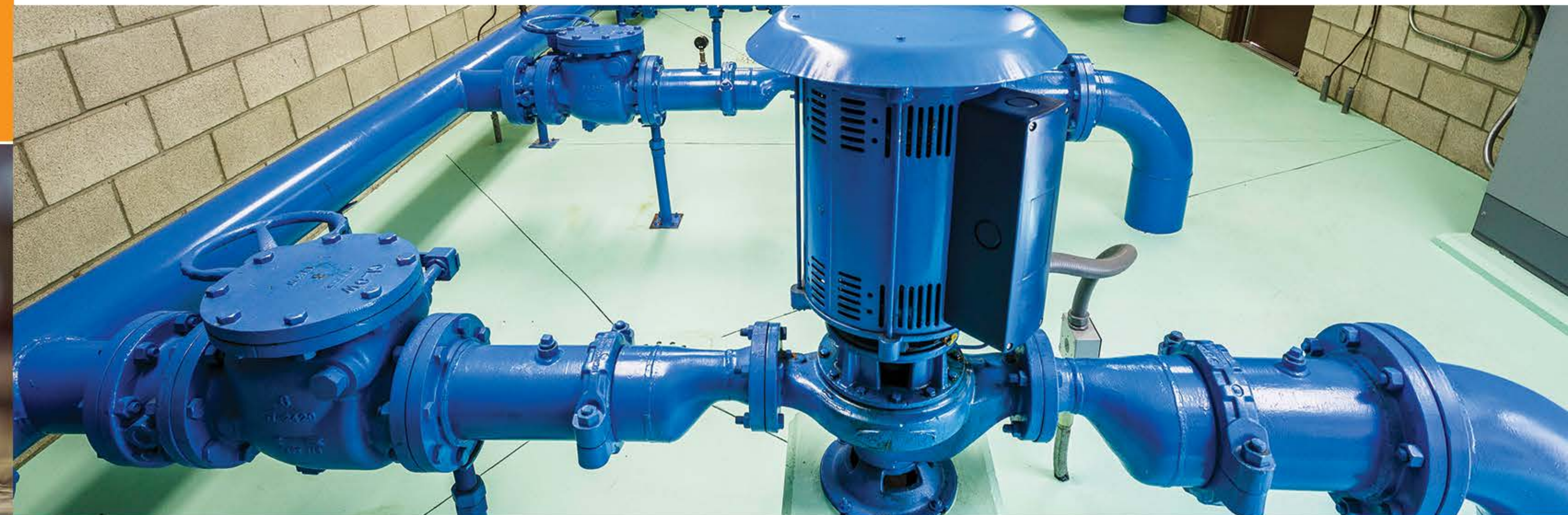
No. Desert Water Agency tap water meets all drinking water standards and does not need to be conditioned or filtered. DWA does not prohibit the use of water softeners, but Agency ordinance does prohibit the discharge of excess salt down the drain. Discharged salt can harm the groundwater and may require additional treatment, which would increase the future costs of providing sewer and water services.



REGULATORY INFORMATION

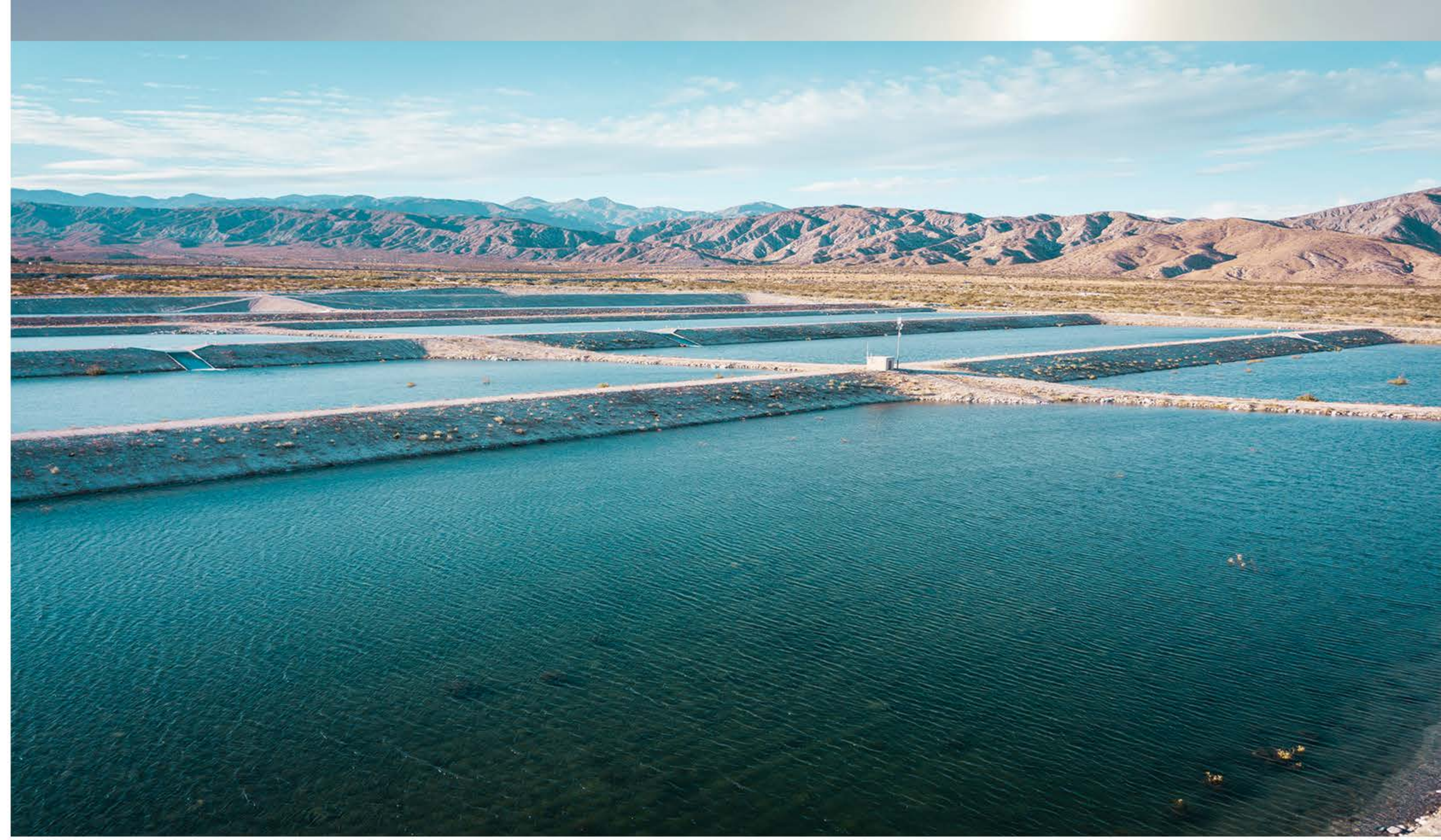
CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- **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 (USEPA) and the State Water Resources Control Board (SWRCB) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. USEPA regulations also establish limits for contaminants in bottled water that provide 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 USEPA's Safe Drinking Water Hotline (1-800-426-4791).



HEALTH INFORMATION

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).

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>.

QUALITY TESTED WATER

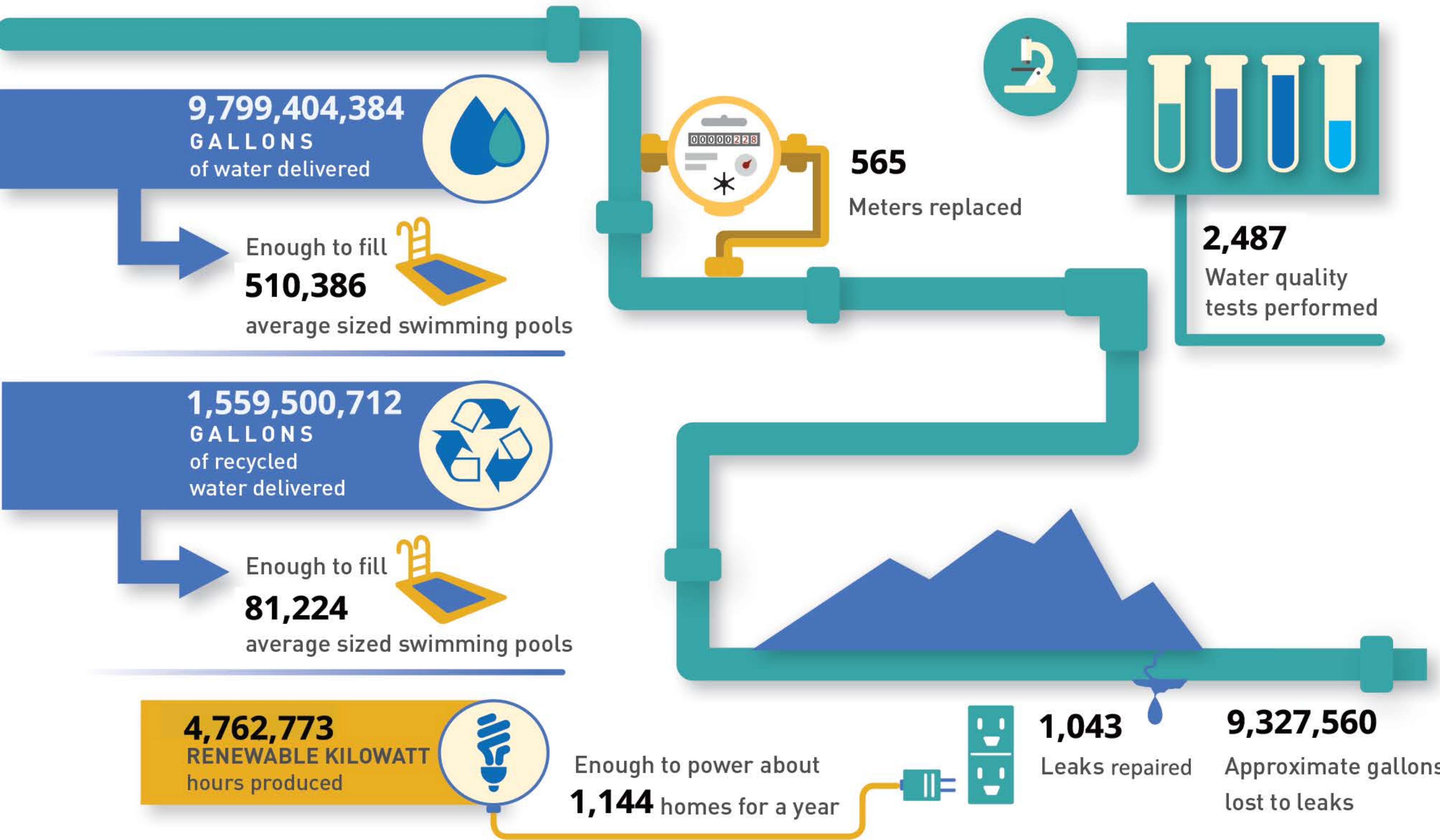
Since the crisis in Flint, Michigan, our community and the country has been asking more questions about toxins in water. California Assembly Bill 746, requires K-12 public schools sample for lead by July of 2019. Desert Water Agency tested public schools in our retail service area. None are above regulatory limits. One school site requested testing, one was exempt and DWA initiated sampling for six. We're fortunate lead isn't an issue here.

Over time, water can sometimes corrode lead plumbing. This is how lead typically gets into water. However, the water we serve has characteristics, like alkalinity and hardness, that make it less corrosive.

Our water mains and service pipelines are not made of lead, but your private plumbing may be. Desert Water Agency goes to dozens of homes and businesses in our community to test water coming from their taps to determine if lead or copper from private plumbing systems is getting into the water. We have not ever had a test for lead above the limit. In fact, for the past several years we did not detect any traces of lead at sites tested.

Technological and regulatory advancement drives us to constantly test our water for more elements and in ever smaller quantities. California has some of the strictest drinking water standards in the world. This does mean that there are more costs to cover for the clean water delivered to your tap. Keep in mind, tap water, which is regulated by California's State Water Resources Control Board, is subject to more rigorous standards than bottled water, which is regulated by the FDA.

DESERT WATER AGENCY 2018 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 dedicated staff samples water daily to ensure that it meets all 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 constituents in the water, this report is our way of providing clear, transparent information to our customers. The board here and staff take their responsibility to provide high-quality water very seriously and we're proud to report that our water meets and beats 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 ext. 169.

BOARD OF DIRECTORS

JOSEPH K. STUART
President

KRISTIN BLOOMER
Vice President

CRAIG EWING
Secretary - Treasurer

PATRICIA G. OYGAR
Director

JAMES CIOFFI
Director

Board Meetings are held the first and third Tuesdays of each month at 8 a.m. at the Desert Water Agency's Operations Center Board Room.



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



Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien. Para alguna pregunta o inquietud, llame al 760-323-4971