WATER QUALITY REPORT

DELIVERED JUNE 2018

DESERT WATER

DEPENDABLE QUALITY TODAY & TOMORROW

In our annual Water Quality Report, we share the data on the water that our team works around the clock to keep safe and readily available. We are proud that the water we deliver to homes and businesses in our community continues to be of even higher quality than state and federal drinking water quality standards require.

We are fortunate to have access to excellent groundwater that has natural minerals in it and relatively few impurities. This means the water only has to be treated with a small amount of chlorine which results in great cost savings. However, we do face challenges. Our aged system requires maintenance and repairs daily. Our team also works to continually find new ways to reduce and reuse water due to California's unpredictable precipitation and new regulations. How we pay for and use water has and will continue to change. Our first and most important objective always is providing safe and dependable water today and for generations to come.

Our winter season was back to below average this year and we are reminded that our sustained existence here in the desert and statewide, is only made possible with careful planning. We are not guaranteed a wet or even average season any year. We know that providing for the future is only possible with an entirely collaborative approach between the community and our team here at Desert Water Agency.

We have learned over the years that water truly is our most precious resource and that conservation is for life. On top of supporting local conservation efforts, Desert Water Agency is also continually acting to conserve water by replacing and repairing broken and aged pipes. With dedication to conservation and essential recharging of the aquifer with imported Colorado River water, we will ensure water for our community for years to come.

We continue to offer conservation programs and rebates to help you save water. Our team is always available to help you understand our programs and the projects we're working on.

You are welcome at our board meetings, held the first and third Tuesday of every month, where you can join your elected representatives, the Board of Directors, in discussions on current water issues. We also encourage you to connect with us online or in person at our office to learn more about your water and your water system.

Hearing what matters to our community helps us serve you better. It is a privilege to provide your water.

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 service area 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, 2017, and December 31, 2017. 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 Beth Amheiser, laboratory director, at (760) 323-4971 ext. 169.

GLOSSARY

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. 1ng/L equals 1 part per trillion. (see parts per trillion).

ND: Not detected or below the detection limit for reporting.

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 caontaminant 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.

Regulated Substances

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[1]	Range (Low-High)	Year Sampled	Amount Detected[1]	Range (Low-High)	Year Sampled	Amount Detected[1]	Range (Low-High)	Yes	No	
Chlorine	mg/L	[4 as Cl2]	[4 as Cl2]	NA	NA	NA	NA	NA	NA	2017	0.33	ND-1.46		★	Drinking water disinfectant added for treatment
Fluoride	mg/L	2	1	2016	0.48	0.19-0.78	2017	ND	ND	NA	NA	NA		★	Erosion of natural desposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity	pCi/L	15	NONE	2014-2017	4.6	3.3-7.4	2013-2016	2.1	ND-6.4	NA	NA	NA		★	Erosion of natural desposits
Haloacetic Acids [HAA5]	ug/L	60	NONE	NA	NA	NA	NA	NA	NA	2017	11.6[1]	ND-10.7		★	By-product of drinking water disinfection
Nitrate (NO_3-N)	mg/L	10	10	2017	0.98	0.09-3.4	2017	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	2017	0.2	ND-0.8[3]	NA	NA	NA	NA	NA	NA		★	Runoff/leaching from natural deposits
Total Trihalomethanes [TTHM]	ug/L	80	NONE	2016	ND	ND	2016	ND	ND	2017	10.7[1]	ND-16.7		★	By-product of drinking water disinfection
Turbidity[2]	NTU	5	NONE	2016	0.1	ND-0.7	2017	0.4	ND-0.7	2017	0.07	ND-.53		★	Soil runoff
Uranium	pCi/L	20	0.5	2010-2017	6.2	2.5-20	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			Violation		Likely Source of Contamination
				Year Sampled	Amount Detected (90th Percetile)	Sites Above AL/ Total Sites	Yes	No	
Copper	mg/L	1.3	0.3	2015	0.32	0/30		★	Interal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Lead	ug/L	15	0.2	2015	ND	0/30		★	Interal corrosion of household 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[7] positive samples	Violation		Likely Source of Contamination
						Yes	No	
Total Coliform Bacteria (State Total Coliform Rule)	5.0% of monthly samples are positive	0	0.3	NA	NA		★	Naturally present in the environment
Fecal Coliform and *E. coli* (State Total Coliform Rule)	See Footnote (5)	0	NA	1	0		★	Human and animal fecal waste
E. coli (Federal Revised Total Coliform Rule)	See Footnote (6)	0	NA	1	0		★	Human and animal fecal waste

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

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.

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

	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	
Secondary Substances	Chloride	mg/L	250	NONE	2016	37	6.8-81	2017	1.6	1.2-2.4	NA	NA	NA		★	Runoff/leaching from natural deposits; seawater influence
	Color	Units	15	NONE	2016	ND	ND	2017	7.5	ND-10	2017	0.11	ND-1.2		★	Naturally occuring organic materials
	Odor-Threshold	TON	3	NONE	2016	1	ND	2017	1	NA	2017	1	NA		★	Naturally occuring organic materials
	Specific Conductance	µS/cm	1600	NONE	2016	580	290-910	2017	150	73-290	NA	NA	NA		★	Substances that form ions when in water; seawater influence
	Sulfate	mg/L	500	45	2016	110	18-220	2017	4.6	0.67-12	NA	NA	NA		★	Runoff/leaching from natural deposits; industrial wastes
	Total Dissolved Solids	mg/L	1000	NONE	2016	370	150-600	2017	110	51-210	NA	NA	NA		★	Runoff/leaching from natural deposits
Other Substances	Aggressive Index	AI	Non-aggressive	NONE	2009	12.5	12-13	2009	10.84	10.65-11.19	NA	NA	NA		★	Influenced by hydrogen, carbon, oxygen, and temperature
	Alkalinity	mg/L	NONE	NONE	2016	130	110-150	2017	75	42-140	NA	NA	NA		★	Function of carbonate, hydroxide, and bicarbonate; naturally occuring
	Bicarbonate	mg/L	NONE	NONE	2016	160	130-180	2017	94	51-180	NA	NA	NA		★	Naturally occurring
	Calcium	mg/L	NONE	NONE	2016	66	25-100	2017	21	9.2-43	NA	NA	NA		★	Contributes to water hardness; naturally occurring
	Hardness	mg/L	NONE	NONE	2016	120	73-340	2017	59	23-130	NA	NA	NA		★	Naturally occurring
	Magnesium	mg/L	NONE	NONE	2016	12	2.1-21	2017	1.5	ND-4.4	NA	NA	NA		★	Contributes to water hardness; naturally occuring
	Potassium	mg/L	NONE	NONE	2016	4.2	2.9-7.6	2017	3.7	1.9-7.0	NA	NA	NA		★	Leaching from water softeners, fertilizers and natural deposits
	pH	NA	NONE	NONE	2016	7.8	7.5-8.2	2017	7.5	7.4-7.6	2016	8	7.3-8.7		★	Naturally occuring
	Sodium	mg/L	NONE	NONE	2016	34	20-72	2017	9	5.2-15	NA	NA	NA		★	Naturally occuring

	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	
Unregulated Substances	Boron	ug/L	1000	2016	13	ND-160	2016	ND	ND	NA	NA	NA		★	Naturally occuring
	Chlorate	ug/L	NONE	2014	64	22-380	NA	NA	NA	NA	NA	NA		★	Erosion of natural deposits
	Hexavalent Chromium[4]	ug/L	NONE	2016	1.7	ND-3.9	2016	ND	ND	NA	NA	NA		★	Naturally occuring
	Molybdenum	ug/L	NONE	2014	4.7	3.4-13	NA	NA	NA	NA	NA	NA		★	Naturally occuring
	Strontium	ug/L	NONE	2014	250	70-450	NA	NA	NA	NA	NA	NA		★	Naturally occuring
	Vanadium	ug/L	50	2016	7.3	ND-11	2017	ND	ND	NA	NA	NA		★	Erosion of natural deposits

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

1. Highest LRAA for 2017.
2. 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.
3. Twelve wellheads out of 13 in the system tested nondetect.
4. The MCL of 10 ppb was withdrawn on 9/11/17. Hexavalent Chromium is presently regulated under the Total Chromium MCL of 50 ppb.
5. If a routine sample is fecal coliform positive and a repeat sample is total coliform positive, then a violation has 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. These repeat sample results validate no violation occurred.

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 that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, the water system must take corrective action.

COMMON QUESTIONS ON WATER QUALITY

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 that is 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.

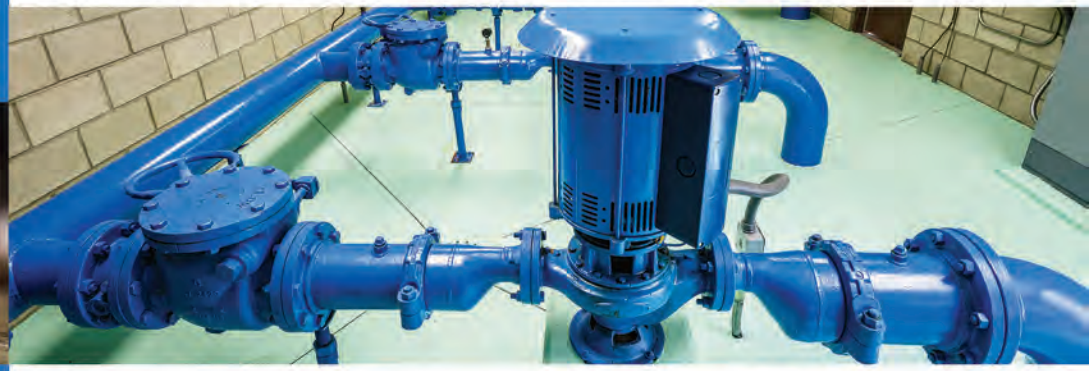
DO I NEED A SOFTENER?

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.

SAFETY OF YOUR WATER

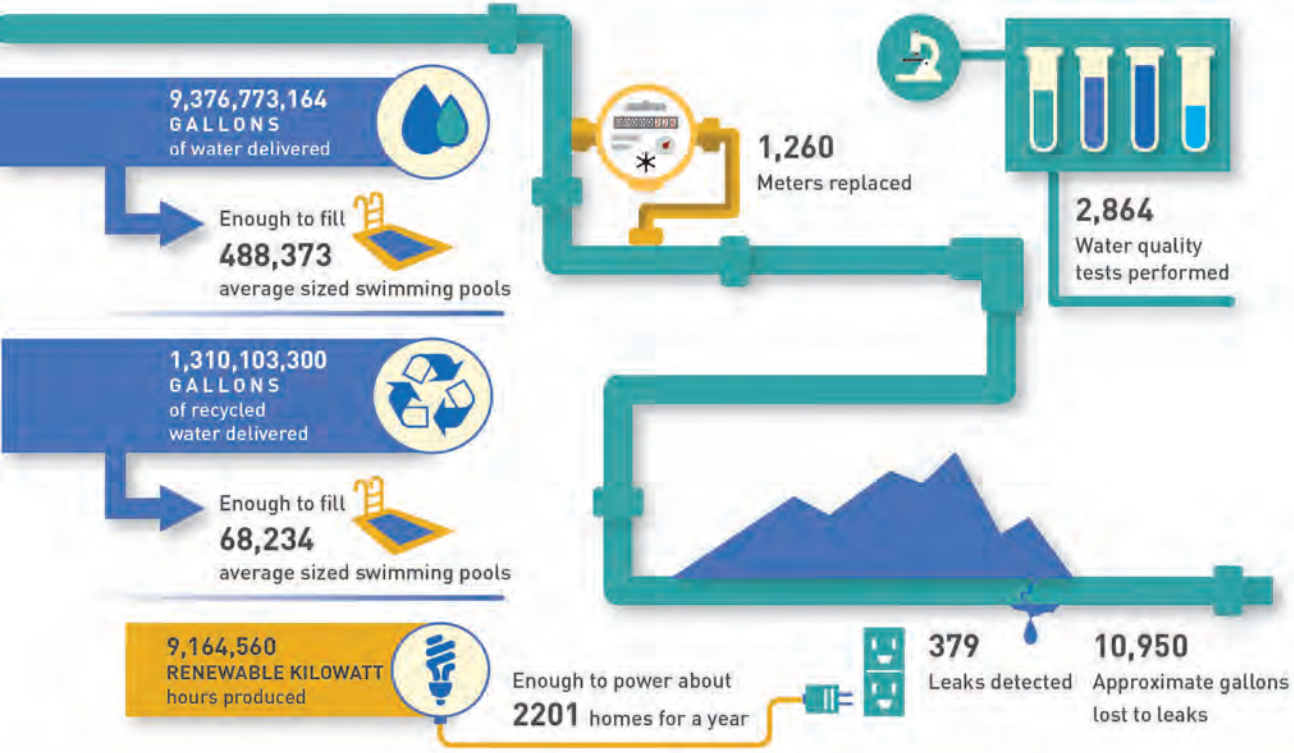
Since the crisis in Flint, Michigan, our community and the country has been more diligent in asking questions about toxins in water such as lead. We're very fortunate that lead isn't an issue in our community. California Assembly Bill 746 however, does require all K-12 public schools to undergo lead sampling by July of 2019. To date, no schools have requested sampling by DWA.

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 pipelines and services 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 the 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 the 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 2017 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 dry 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. To make going through our report easier for customers, we've included informational videos; we hope that you enjoy them. The board and staff of DWA 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 Beth Amheiser, laboratory director, at (760) 323-4971 ext. 169.

BOARD OF DIRECTORS

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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.

DESERT WATER

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