



# 2017 Water Quality Report

## GOVERNANCE

Regularly scheduled meetings of the Mission Springs Water District Board of Directors are held on the third Monday of each month at 3 p.m. in the District Administration Building, 66575 Second Street, Desert Hot Springs, CA 92240. Study sessions are the Thursday prior to the Board meeting. These meetings provide an opportunity for public participation in decisions that affect your water district.



## KNOW YOUR WATER

Mission Springs Water District is committed to keeping you informed about the quality of your drinking water. This report is provided annually and includes information on where your drinking water comes from, the constituents found in your drinking water, and how the water quality compares with regulatory standards. We are proud to report that during 2017, the drinking water provided by Mission Springs Water District met or surpassed all Federal and State drinking water standards. We remain dedicated to providing you with a reliable supply of high quality drinking water.

For more information or questions regarding this report, please contact John Soulliere at (760) 329-6448, ext. 144, or by email at [info@mswd.org](mailto:info@mswd.org).

*Este informe contiene información muy importante sobre su agua potable. Para más información ó traducción, favor de contactar a John Soulliere al telefono: (760) 329-6448, ext. 144 o por correo electrónico a [info@mswd.org](mailto:info@mswd.org).*



## MISSION SPRINGS WATER DISTRICT BOARD OF DIRECTORS

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# WHERE DOES MY DRINKING WATER COME FROM?

## WATER SOURCES

MSWD provides high-quality drinking water to a 135 square mile service area that includes the city of Desert Hot Springs, a portion of Palm Springs, and the unincorporated communities of North Palm Springs, West Garnet, Desert City, portions of the Desert Edge Community, Painted Hills, Mission Lakes CC and west to the Cabazon Indian Reservation.

For the Desert Hot Springs area, the Mission Creek Sub-basin (Aquifer) provides the majority of the municipal water supply. It is bounded on the north by the Mission Creek Fault and on the south by the Banning Fault. Nine deep water wells within the Mission Creek Sub-basin and one within the Indio Basin (Garnet Sub-basin) provide water to the District's distribution system. MSWD's western-most service area includes the West Palm Springs Village and Palm Springs Crest areas. These areas receive water produced from the Cabazon Groundwater Basin (Aquifer), which is in the eastern portion of the San Gorgonio Pass Sub-basin.

*To learn more about our watershed, visit the U.S. EPA's Surf Your Watershed Web site at [www.epa.gov/surf](http://www.epa.gov/surf), and search for the Salton Sea Watershed.*

## CHROMIUM-6 AND YOUR WATER

MSWD is proud to deliver high-quality, award-winning water that meets or exceeds all state and federal drinking water standards at the lowest possible cost to customers. In 2014, California became the first state to regulate Chromium-6 (CrVI) as a stand-alone constituent. CrVI is a mineral found in the California Serpentine Rock and naturally occurs in many groundwater basins throughout the state, including in the Coachella Valley.

California's Cr6 standard is now under review by the State Water Resources Control Board as a result of a California Superior Court order. CrVI at certain levels may pose long-term health risks if consumed in moderately high quantities over a period of decades. The current standard for Chromium is 50 PPB (parts per billion). MSWD does not produce or serve water that exceeds the current standard. Once a revised CrVI standard is issued, MSWD will ensure compliance.

## DRINKING WATER SOURCE ASSESSMENT

Source water assessments for the District's wells were completed by May 2007, as required by law. The assessments indicated that the wells are not being impacted by surface development. Although no man-made contaminants have been detected, the Source Water Assessments found that septic systems, illegal dumping, and chemical/petroleum lines are potential sources of contamination. Assessment reports are available for review at MSWD's Administrative Offices located at 66575 Second Street, Desert Hot Springs, CA, 92240.

## WHAT ARE QUALITY STANDARDS?

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Water Resources Control Board, Division of Drinking Water (DDW), prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water standards established by USEPA and DDW set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

-  **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 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.
-  **Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements and water treatment requirements.
-  **Regulatory Action Level (AL):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.
-  **Notification Level (NL):** An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. city council/county board of supervisors).

In addition to mandatory water quality standards, USEPA and DDW have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

- 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 USEPA.
- 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.
- 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.

## WHAT CONTAMINANTS MAY BE PRESENT IN SOURCES OF DRINKING WATER?

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.

*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.
- Radioactive contaminants**, which can be naturally-occurring or can be the result of oil and gas production and mining activities.
- Organic chemical contaminants**, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gasoline stations, urban stormwater runoff, agricultural application, and septic systems.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

## WHAT IS IN MY DRINKING WATER?

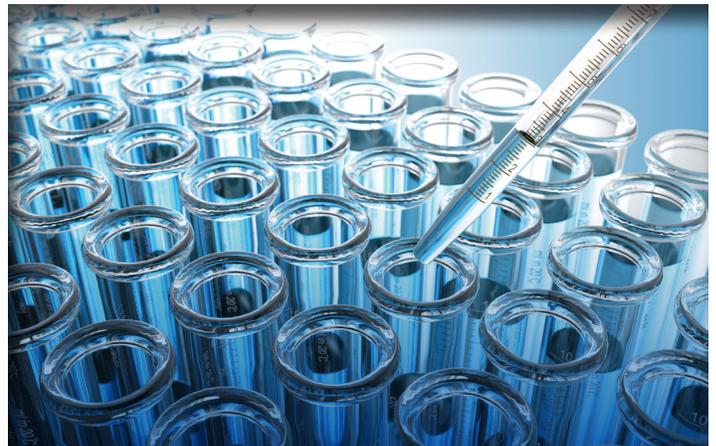
Your drinking water is tested by certified professional water system operators and certified laboratories to ensure its safety. The chart in this report shows the average and range of concentrations of the constituents tested in your drinking water during year 2017 or from the most recent tests. The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old. The chart lists all the contaminants detected in your drinking water that have Federal and State drinking water standards. Detected unregulated contaminants of interest are also included.

## ARE THERE ANY PRECAUTIONS THE PUBLIC SHOULD CONSIDER?

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).

## INFORMATION ON LEAD IN DRINKING WATER

Since 2017, public schools have had the option of requesting local water agencies collect water samples to test for lead. New regulations now require local water agencies to test lead levels by July 1, 2019 at all K-12 schools constructed before 2010. 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. Mission Springs Water District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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: <https://www.epa.gov/lead>.



	2017 SAMPLE RESULTS					W. PALM SPRINGS VILLAGE		PALM SPRINGS CREST		DESERT HOT SPRINGS		VIOLATION	MAJOR SOURCE OF CONTAMINANT	
	ANALYTE	YEAR SAMPLED	UNIT	MCL (MRDL) (MRDLG)	PHG (MCLG)	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE			
REGULATED SUBSTANCES	Aluminum	2017	mg/L	0.2	0.6	ND	ND - 0.08	ND	ND	ND	ND	No	Erosion of natural deposits; residue from some surface water treatment processes	
	Arsenic	2017	µg/L	10	.004	ND	ND	ND	ND	ND	ND - 2.7	No	Erosion of natural deposits; glass/electronics production waste	
	Chlorine [CL2]	2017	mg/L	4.0	4.0	0.61	0.44 - 0.72	0.61	0.37 - 0.88	0.58	0.4 - 0.81	No	Drinking water disinfectant added for treatment	
	Chromium	2017	µg/L	50	100	ND	ND	ND	ND	ND	ND - 27	No	Discharge from steel and pulp mills and chrome plating; erosion from natural deposits	
	Fluoride	2017	mg/L	2.0	1	0.61	0.47 - 0.75	1.3	1.3	0.65	0.51 - 0.84	No	Erosion of natural deposits	
	Gross Alpha Particle Activity	2017	pCi/L	15	(0)	ND	ND	ND	ND	ND	ND - 2.2	No	Erosion of natural deposits	
	Hexavalent Chromium	2017	µg/L	10	0.02	2.7	1.20 - 4.20	2.35	ND - 4.7	7.4	ND - 15	No	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities, erosion of natural deposits	
	Nitrate [N]	2017	mg/L	10	10	3.65	3.30 - 4	0.95	0.9 - 1	0.72	ND - 1.7	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Uranium	2017	pCi/L	20	0.43	1.38	ND - 2.5	4.8	4.1 - 5.5	6.93	ND - 16	No	Erosion of natural deposits		
SECONDARY STANDARDS	ANALYTE	YEAR SAMPLED	UNIT	MCL (MRDL)	PHG (MCLG)	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	VIOLATION	MAJOR SOURCE OF CONTAMINANT	
	Chloride	2017	mg/L	500	NS	29.50	14 - 45	8.6	8.5 - 8.6	30.1	5.9 - 92	No	Runoff/leaching from natural deposits	
	Odor-Threshold [6]	2017	TON	3	NS	1	1	1	1	1.1	1 - 2	No	Naturally occurring organic materials	
	Specific Conductance	2017	µS/cm	1,600	NS	580	440 - 720	435	430 - 440	667	320 - 990	No	Substances that form ions in water	
	Sulfate	2017	mg/L	500	NS	44.5	19 - 70	18.0	16 - 20	160.4	35 - 280	No	Runoff/leaching from natural deposits and industrial wastes.	
	Total Dissolved Solids	2017	mg/L	1,000	NS	345	240 - 450	245	220 - 270	425	190 - 640	No	Runoff/leaching from natural deposits	
	Turbidity	2017	NTU	5	NS	0.1	ND - 0.2	0.1	ND - 0.2	0.35	0.1 - 3.2	No	Soil Runoff	
	Zinc	2017	mg/L	5	NS	ND	ND	ND	ND	ND	ND	No	Runoff/leaching from natural deposits	
OTHER CONSTITUENTS OF INTEREST	ANALYTE	YEAR SAMPLED	UNIT	MCL (MRDL)	PHG (MCLG)	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	VIOLATION	MAJOR SOURCE OF CONTAMINANT	
	Boron	2017	µg/L	NA	NA	ND	ND	ND	ND	ND	ND - 100	No	Runoff/leaching from natural deposits	
	Calcium	2017	mg/L	NA	NA	61	48 - 74	53.5	53 - 54	53.6	19 - 100	No	Runoff/leaching from natural deposits	
	Hardness ( as CaCO <sub>3</sub> )	2017	mg/L	NA	NA	230	160 - 300	190	190	190.8	58 - 360	No	Runoff/leaching from natural deposits	
	pH	2017	Unit	NA	NA	7.7	7.6 - 7.7	7.7	7.6 - 7.7	7.7	7.6 - 7.8	No	Hydrogen ion concentration	
	Sodium	2017	mg/L	NA	NA	31.0	27 - 35	19.5	18 - 21	66.2	48 - 110	No	Runoff/leaching from natural deposits	
	Vanadium	2017	µg/L	NA	NA	8.7	5.3 - 12	8.4	8.1 - 8.6	19.7	6.9 - 72	No	Runoff/leaching from natural deposits	
DISTRIBUTION SYSTEM	ANALYTE	YEAR SAMPLED	UNIT	MCL (MRDL)	PHG (MCLG)	AVERAGE	RANGE	AVERAGE	RANGE	AVERAGE	RANGE	VIOLATION	MAJOR SOURCE OF CONTAMINANT	
	Haloacetic Acids	2017	µg/L	60	NA	1.0	1.0	ND	ND	1.6	ND - 1.6		By-product of drinking water disinfection	
	TTHMs [Total Trihalomethanes]	2017	µg/L	80	NA	16.7	16.7	5.7	5.7	17.1	ND - 17.1		By-product of drinking water disinfection	
LEAD & COPPER	ANALYTE	YEAR SAMPLED	UNIT	AL	PHG (MCLG)	90TH PERCENTILE	SITES ABOVE AL	90TH %TILE	SITES ABOVE AL	90TH %TILE	SITES ABOVE AL	VIOLATION	MAJOR SOURCE OF CONTAMINANT	
	Lead	2017	µg/L	15	0.2	ND	0/10	ND	0/7	ND	1/45		Corrosion of household plumbing	
	Copper	2017	mg/L	1.3	0.3	0.16mg/L	0/10	0.13mg/L	0/7	0.2	0/45		Corrosion of household plumbing	
In 2017, 0 schools requested lead testing.														
DISTRIBUTION SYSTEM COLIFORM BACTERIA	ANALYTE	YEAR SAMPLED	UNIT	MCL (MRDL)	MCLG (MRDLG)	NUMBER OF DETECTIONS	NO OF VIOLATIONS	MAJOR SOURCE OF CONTAMINANT						
	Total Coliform Bacteria (state Total Coliform Rule)	2017	positive/negative	5.0% of monthly samples are positive;	0	0%	None	Naturally present in the environment						
	Fecal Coliform or E. coli (state Total Coliform Rule)	2017	positive/negative	(a)	0	0	None	Human and animal fecal waste						
	(a) A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. coli positive.													
	E. coli (federal Revised Total Coliform Rule)	2017	positive/negative	(b)	0	0	None	Human and animal fecal waste						
(b) Routine and repeat samples are total coliform-positive and either is E. coli-positive or system fails to take repeat samples following E. coli-positive routine sample or system fails to analyze total coliform-positive repeat sample for E. coli.														
UNREGULATED CONTAMINANTS	ANALYTE	YEAR SAMPLED	UNIT	LEVEL DETECTED	RANGE	PHG	HEALTH EFFECTS LANGUAGE							
	Hexavalent Chromium	2017	ppb	7.4	ND - 15	0.02 <sup>1</sup>	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.							
<sup>1</sup> The hexavalent chromium MCL was invalidated during the 2017 calendar year, but Mission Springs Water District is required to report the information it collected prior to the MCL being invalidated.														

## NOTES

AL = Action Level  
DLR = Detection Limit for Purposes of Reporting  
MCL = Maximum Contaminant Level  
MCLG = Maximum Contaminant Level Goal  
mg/l = parts per million or milligrams per liter  
ng/l = parts per trillion or nanograms per liter

MRDL = Maximum Residual Disinfectant Level  
MRDLG = Maximum Residual Disinfectant Level Goal  
NA = No Applicable Limit  
ND = Not Detected at DLR  
NL = Notification Level  
NS = No Standard

TON = Threshold Odor Number  
NTU = Nephelometric Turbidity Units  
pCi/l = picoCuries per liter  
PHG = Public Health Goal  
µg/l = parts per billion or micrograms per liter  
µS/cm = microsiemens per centimeter