

LAS VIRGENES MUNICIPAL WATER DISTRICT

2019 Water Quality &
Consumer Confidence Report



4232 Las Virgenes Road
Calabasas, CA 91302

TO OUR VALUED CUSTOMERS



We all have been going through an unprecedented moment in our history. No matter how challenging the world becomes, LVMWD will always provide high quality, healthy, clean, and cost effective water to you and your businesses. This is our commitment to you and our most important function as a water District.

We have always been a forward thinking organization from our inception and grassroots efforts dating back 62 years. We were one of the first Districts in the state to reuse recycled water from our Tapia Water Reclamation Facility for outdoor irrigation of parks, sports fields, medians, and eventually some homes and businesses.

We are only one of two Districts in California that uses an automated “in vessel” process to create nutrient rich Grade – A Exceptional compost as a free service to our communities. Not only is this a beneficial reuse of treatment byproducts, it is also a way for us to help close the sustainability loop by removing the need to

haul bio-solids hundreds of miles away for disposal which minimizes our carbon footprint.

New expanded solar field will provide millions in savings while reducing our carbon footprint.

We are in the process of expanding our one-megawatt solar field to five-megawatts. The energy created from this expansion will completely offset annual electrical costs for the Tapia Water Reclamation Facility saving money for our customers and the need to continue relying on expensive electricity that releases greenhouse gas emissions into the atmosphere.

Our region relies solely on imported water from the Northern Sierra Nevada Mountains. In the event of another drought or emergency, it is critical that we expand our water portfolio so we can localize our water supply. The Pure Water Project Las Virgenes Triunfo Demonstration Facility is slated to open its doors for tours and water sampling in the fall of 2020.



The proven technology will take recycled water and further treat it to drinking water standards as a way to create a localized drinking water source. It will account for nearly 15% of our drinking water needs.

I want to thank all of our customers for your trust in our abilities in being your water provider. Our staff is highly trained and certified to ensure that you receive the safest and best product possible. We will continue to look forward by implementing cost-effective, sensible, thoughtful, and environmental conscientious decisions that benefit all of us.

Sincerely,

A handwritten signature in black ink that reads "Dave W. Pedersen". The signature is fluid and cursive.

Dave W. Pedersen, P.E.
General Manager



Advanced Water Treatment Equipment at the Pure Water Demonstration Facility at LVMWD HQ.

OUTDOOR WATER CONSERVATION TIPS

The most common mistake people make in their home landscaping is not properly adjust their irrigation timers for the change in seasons. This adjustment is especially critical in maintaining an efficient irrigation schedule.

A weather based irrigation controller (WBIC) can take the confusion out of setting your irrigation schedule. This cutting-edge technology harnesses the science of Evapotranspiration; the combined measure of water loss by plants caused by evaporation and transpiration. This, in tandem with the utilization of local climate data and weather information, means the WBIC is fine tuning the irrigation to the actual site conditions of your yard. Weather based irrigation is the most effective way to support a drought tolerant and water efficient landscape. Both over and under watering our landscapes weakens the plants, and makes them more vulnerable to high temps and the dry weather.

Over watering landscapes represents one of the largest sources of water waste in our district, state and country. The United States Environmental Protection Agency estimates that residential outdoor water use in the United States accounts for almost 9 billion gallons of water a day and as much as 50 percent of this is wasted from overwatering caused by inefficiencies in irrigation techniques and systems. Replacing a conventional timer with a WBIC can eliminate a large part of that wasted water by optimally scheduling your irrigation.

Additionally, customers can maximize their outdoor irrigation by employing a few simple techniques.

Aeration: If your lawn is turning brown at the first sign of heat, or has poor drainage it could be a sign of soil compaction. Aeration is a process where holes are put into the soil, breaking up the compacted soil to allow water, air and nutrients to reach the grass roots. This promotes deeper root growth making your lawn more water efficient and resilient when the heat of summer comes.

Topdressing/Feeding/Fertilizing: This helps condition your soil, adds nutrients crucial to healthy plant growth, and is a great way to promote water absorption for both your lawns and planters. Feeding is best done when soil is moist so look to take advantage and fertilize when rain is forecasted.

Overseeding: If your lawn is looking a little bare in spots applying grass seed after aeration and top dressing is a great option to help fill in your turf, this is best done as winter turns to spring. Overseeding isn't appropriate for all types of turf, but can be a good way to fill in some of the bare spots.

Irrigation Tune-Up: With summer upon us, you will need to rely on your irrigation system to get your landscape the water it needs. Make sure that your irrigation system is operating properly and free of leaks. Many times, coverage deficiencies and improper irrigation schedules can be the cause of many landscape issues. Run each station individually making sure each sprinkler head is properly aligned and not being blocked by new plant growth.

For more on water conservation go to LVMWD.com/Conservation



HIGHLY TRAINED

CERTIFIED

DEDICATED

EXPERIENCED

LV TAP
WWW.OURLVTAP.COM

**DRINK
FROM THE
SINK**

YOUR WATER & THIS ANNUAL REPORT

LVMWD is entirely dependent upon water imported from elsewhere; there are no local drinking water sources. The supply to our region travels hundreds of miles from Lake Oroville in the Sierras via the State Water Project and is then treated and conveyed to the District by the Metropolitan Water District of Southern California (MWD). LVMWD is one of MWD's 26 member agencies.

Your water is routinely tested before it ever reaches the tap. This report conveys the results of tests conducted in 2019. Readers of this report sometimes ask if the substances identified in the report are harmful. It is normal to find trace amounts of contaminants in tap water or bottled water unless it is distilled or treated through a process such as reverse osmosis. Trace salts,

chemicals and minerals are natural and keep water from tasting "flat."

When evaluating the presence of contaminants in your water, consider the following comparative measures:

One part per million (milligrams per liter) equals three drops added to a 42-gallon barrel.

One part per billion (micrograms per liter) equals one drop added to a large tanker truck.

One part per trillion (nanograms per liter) equals ten drops added to the Rose Bowl Stadium filled with water.

One part per quadrillion (picograms per liter) equals two teaspoons added to Utah's Great Salt Lake.

SUBSTANCES FOUND IN DRINKING WATER

The sources of drinking water (both tap 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 various contaminants.

Contaminants that we test for and may be present in source water include:

- Microbes, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganics, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides that may come from a variety of sources, such as agriculture, urban stormwater runoff and residential uses.
- Radioactive materials that can be naturally occurring

or the result of oil and gas production and mining activities.

- Organic chemicals, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production. These chemicals can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.

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.

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the 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 at (800) 426-4791.

HEALTH ADVISORY FOR PERSONS WITH WEAKENED IMMUNE SYSTEMS

Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immunocompromised, such as those undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders and some elderly and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water.

USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available by calling the **Safe Drinking Water Hotline at (800) 426-4791.**



HOW TO READ THESE TABLES

These tables may contain complex measurements and terminology, but they also contain valuable information about the water delivered to your tap. The District is required to report contaminants that are detected; **none were found at levels considered to be unsafe or unhealthy in LVMWD tap water.**

Testing results are presented for source water from the Jensen Water Treatment Plant operated by the Metropolitan Water District of Southern California (MWD) and for LVMWD's water delivery system. The values provided in the "LVMWD" column more closely represent the quality of water delivered to most homes and businesses. Should you have any questions or need clarification, please call us at (818) 251- 2200, or contact any of the agencies listed in this report under "Additional Information."

DEFINITION OF TERMS AND FOOTNOTES	
DEFINITION OF TERMS	
AI	Aggressiveness Index
AL	Action Level
Average	Result based on arithmetic mean
CaCO ₃	Calcium Carbonate
CCPP	Calcium Carbonate Precipitation Potential
CFE	Combined Filter Effluent
CFU	Colony-Forming Units
DLR	Detection Limits for Purposes of Reporting
HAA5	Sum of five haloacetic acids
HPC	Heterotrophic Plate Count
LRAA	Locational Running Annual Average; highest LRAA is the highest of all Locational Running Annual Averages calculated as an average of all samples collected within a 12-month period
MCL	Maximum Contaminant Level
MCLG	Maximum Contaminant Level Goal
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
NA	Not Applicable or Not Tested
ND	Not Detected at or above DLR or RL
NL	Notification Level to SWRCB
NTU	Nephelometric Turbidity Units
pCi/L	picoCuries per Liter
PHG	Public Health Goal, represents the ultimate long term contaminant level
ppb	parts per billion or micrograms per liter (µg/L)
ppm	parts per million or milligrams per liter (mg/L)
PDWS	Primary Drinking Water Standard
RAA	Running Annual Average; highest RAA is the highest of all Running Annual Averages calculated as an average of all the samples collected within a 12-month period
Range	Results based on minimum and maximum values; range and average values are the same if a single value is reported for samples collected once or twice annually
RL	Reporting Limit
SI	Saturation Index (Langelier)
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
TON	Threshold Odor Number
TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water
TTHM	Total Trihalomethanes

HOW DID WE DO IN 2019? WATER QUALITY REPORT (BASED ON WATER SAMPLED IN 2019)

Primary Standards apply to contaminants that may be unhealthy at certain levels. They are measured in terms of Maximum Contaminant Levels (MCLs) as published by the State of California. If water contains a contaminant level above a primary MCL, the safety of the water cannot be assured. **None of the tests for water served to LVMWD customers exceeded the MCLs.**

PARAMETER	UNITS	STATE OR FEDERAL MCL [MRDL]	PHG (MCLG) [MRDLG]	STATE DLR	RANGE AVERAGE	JEN-SEN PLANT 2019	LVMWD 2019	MAJOR SOURCES IN DRINKING WATER	WATER QUALITY STANDARDS MET
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Percent State Water Project	%	NA	NA	NA	NA	Range Average	100	10	NA	NA
PRIMARY STANDARDS—MANDATORY HEALTH-RELATED STANDARDS										
CLARITY										
Combined Filter Effluent (CFE) Turbidity (a)	NTU	TT	NA	NA	NA	Highest	0.06	0.31	Soil runoff	
	%					% <= 0.3	100	100		
MICROBIOLOGICAL										
Total Coliform Bacteria (b)	%	5.0	MCLG = 0	NA	NA	Range	0 - 0.2	0-1.1	Naturally present in the environment	
	Positive Month-ly Sam- ples					Average	0	0.5		
Heterotrophic Plate Count (HPC) Bacteria	CFU/ mL	TT	NA	(l)	NA	Range	ND - 64	ND-160	Naturally present in the environment	
						Median	ND	ND		
INORGANIC CHEMICALS										
Aluminum	ppb	1,000	600	50	NA	Range	ND - 290	ND-52	Residue from water treatment process; runoff and leaching from natural deposits	
						Highest RAA	58	ND		
Fluoride (c)	ppm	2.0	1	0.1	NA	Range	0.4 - 0.8	0.6-0.9	Runoff and leaching from natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
						Average	0.7	0.7		
Nitrate (as Nitrogen)	ppm	10	10	0.4	NA	Range	0.5	ND-0.6	Runoff and leaching from fertilizer use; septic tank and sewage; runoff and leaching from natural deposits	
						Average		0.4		
RADIOLOGICALS										
Cross Alpha Particle	pCi/l	15	MCLC	2	NA	Range	ND	ND	Runoff and leaching from natural deposits	

Gross Alpha Particle Activity	pCi/L	15		MCLG = 0	3	Range	ND - 3	ND	Runoff/leaching from natural deposits	YES
Uranium	pCi/L	20		0.43	1	Range	ND - 1	NA	Runoff/leaching from natural deposits	YES
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS (d)										
Total Trihalomethanes (TTHMs)	ppb	80		NA	1.0	Range	12 - 21	7-88	Byproduct of drinking water chlorination	YES
(Plant Core Locations and Distribution System)						Highest LRAA	17	31		
Sum of Five Haloacetic Acids (HAA5)	ppb	60		NA	1.0	Range	2.0 - 5.0	ND-18	Byproduct of drinking water chlorination	YES
(Plant Core Locations and Distribution System)						Highest LRAA	3.4	7.5		
Total Chlorine Residual	ppm	MRDL = 4.0		MRDLG = 4	(0.05)	Range	0.5 - 2.9	ND-2.7	Drinking water disinfectant added for treatment	YES
						Highest RAA	2.4	1.8		
Bromate	ppb	10		0.1	1.0	Range	1.6 - 8.4	NA	Byproduct of drinking water ozonation	YES
						Highest RAA	5.6			
Total Organic Carbon (TOC)	ppm	TT		NA	0.30	Range	2.0 - 2.5	3.7-4.7	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts	YES
						Highest RAA	2.3	4.1		
SECONDARY STANDARDS—AESTHETIC STANDARDS										
Aluminum	ppb	200		600	50	Range	ND - 290	ND-52	Residue from water treatment process; runoff/leaching from natural deposits	YES
						Highest RAA	58	ND		
Chloride	ppm	500		NA	(2)	Range	62	51-110	Runoff/leaching from natural deposits; seawater influence	YES
						Average		73		
Color	Color Units	15		NA	(1)	Range	1 - 2	ND-52	Naturally-occurring organic materials	YES
						Average	2	ND		
Odor Threshold (e)	TON	3		NA	1	Range	ND - 1	ND-8	Naturally-occurring organic materials	YES
						Average	ND	ND		

WATER QUALITY DATA CONTINUED ON NEXT PAGE

Calcium Carbonate Precipitation Potential (CCPP) (as CaCO3) (g)	ppm	NA	NA	Range	1.1 - 3.5	Elemental balance in water; affected by temperature, other factors	NA
					Average		
Corrosivity (as Aggressiveness Index) (h)	AI	NA	NA	Range	12.1 - 12.3	Elemental balance in water; affected by temperature, other factors	NA
				Average	12.2		
Corrosivity (as Saturation Index) (i)	SI	NA	NA	Range	0.28 - 0.46	Elemental balance in water; affected by temperature, other factors	NA
				Average	0.37		
pH	pH Units	NA	NA	Range	8.4 - 8.5	NA	NA
				Average	8.4		

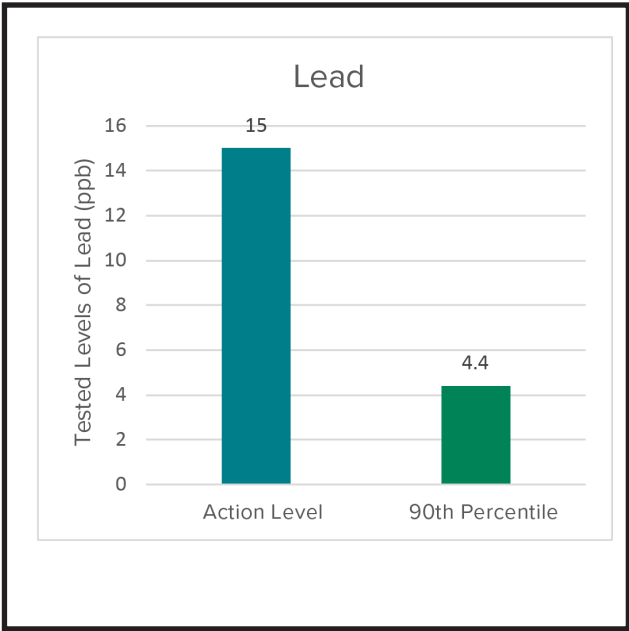
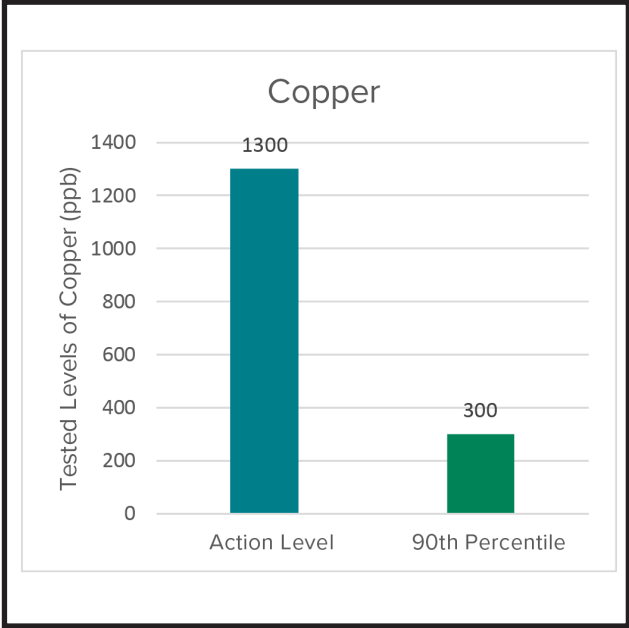
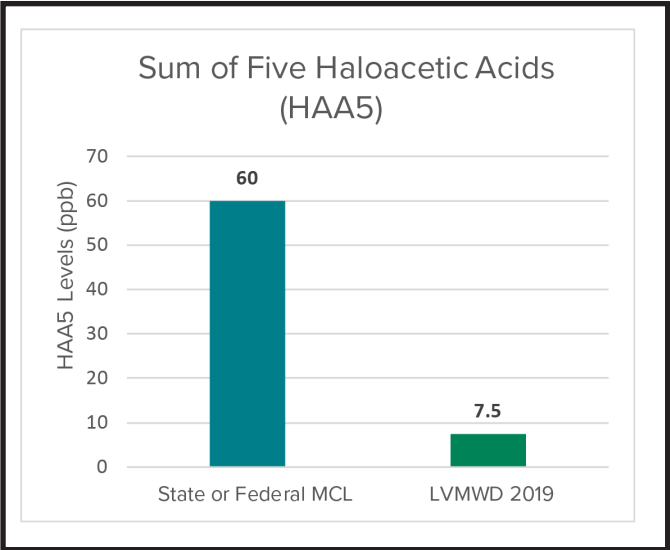
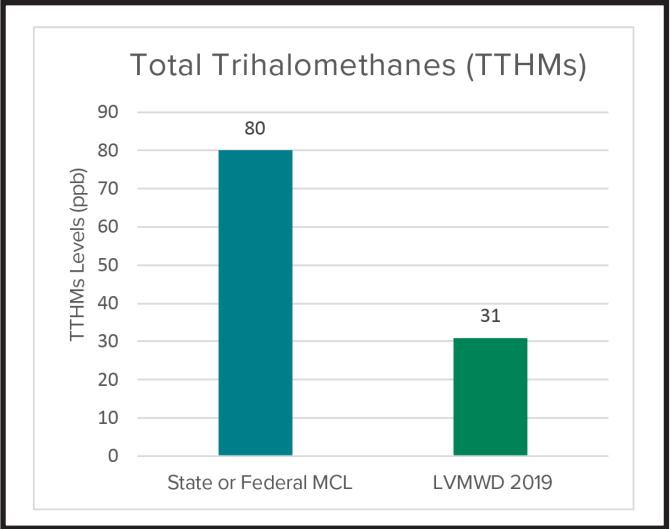
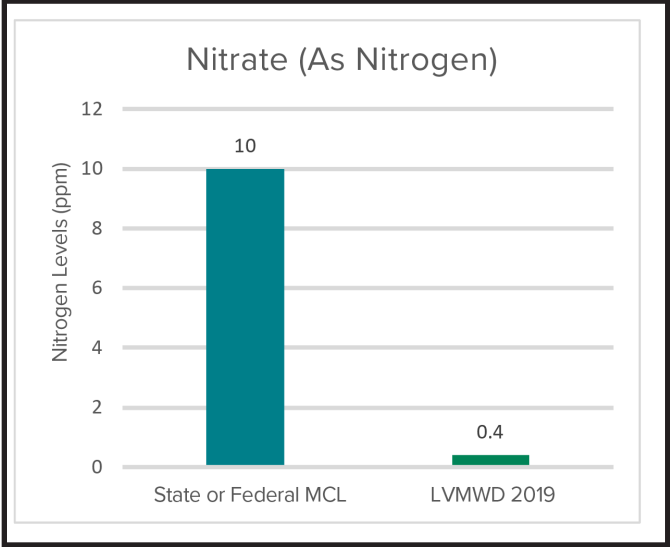
PARAMETER	YEAR SAMPLED	UNITS	AL	PHG (MCLG) [MRDLG]	STATE DLR	90TH PERCENTILE 2019	# SITES SAMPLED 2019	# SITES OVER AL 2019	EXCEEDED AL Y/N	MAJOR SOURCES IN DRINKING WATER	WATER QUALITY STANDARDS MET
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INORGANIC CHEMICALS											
Lead (j)	2019	ppb	15	0.2	5	4.4	64	0	N	House pipes internal corrosion; erosion of natural deposits	YES
Copper (j)	2019	ppb	1300	300	50	300	64	0	N	House pipes internal corrosion; erosion of natural deposits	YES

FOOTNOTES

(a)	Turbidity, a measure of cloudiness of the water, is an indicator of treatment performance. Turbidity was in compliance with the TT primary drinking water standard and the secondary drinking water standard of less than 5 NTU.										
(b)	Compliance is based on monthly samples from treatment plant effluents and the distribution system.										
(c)	MWD was in compliance with all provisions of the State's fluoridation system requirements.										
(d)	Compliance with the State and Federal MCLs is based on RAA or LRAA, as appropriate.										
(e)	Compliance with odor threshold secondary MCL is based on RAA.										
(f)	Data are from two analytical methods based on EPA 5371 and a research method for 18 different PFAS.										
(g)	Positive CCPP = non-corrosive; tendency to precipitate and/or deposit scale on pipes.										
(h)	Negative CCPP = corrosive; tendency to dissolve calcium carbonate.										
(i)	Positive SI = non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI = corrosive; tendency to dissolve calcium carbonate.										
(j)	Thirty (31) households were sampled in 2017 to determine the 90th percentile and none exceeded the action level.										

The graphs below easily illustrate the consistently high-quality water that LVMWD delivers to our customers.
None of the tests for water served to LVMWD customers exceeded the MCLs.



LEARNING MORE ABOUT LEAD EXPOSURE

Recent news stories have raised questions about the presence of lead in drinking water systems. LVMWD's water distribution system has no lead pipes. In compliance with monitoring requirements, the District tested for lead at 64 different locations throughout the service area. Results show that the levels of lead in LVMWD's water are well within state and federal guidelines.

In our region, lead in drinking water primarily comes from materials and components associated with home plumbing. These sources can include pipes, soldering materials used at pipe joints and older fixtures such as faucets. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children.

During 2018, LVMWD completed state mandated sampling and testing for lead at all 13 public schools within our service area. All schools passed and tested below the limit for lead. In 2019 lead and copper tests were not requested by any schools.

When your water has been sitting for extended periods of time, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two 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 at (800) 426-4791 or at [epa.gov/safewater/lead](https://www.epa.gov/safewater/lead).

PFAS/PFOA - INFORMATION FOR OUR CUSTOMERS

Concerns over per- and polyfluoroalkyl substances, or "PFAS", have been in the news recently and LVMWD customers deserve to be in the know. Our commitment to transparency and the delivery of safe, high quality water remains at the forefront of our mission.

PFAS, first developed in the 1940's, are human-made substances commonly found in consumer products, such as non-stick pans, water resistant clothing, and food packaging. These substances are also present in fire-fighting foam, manufacturing industries, airports, and military facilities. They are considered extremely stable, meaning the compounds within the chemicals do not break down, lending them the name "forever chemicals".

As with just about anything, the prevalence of PFAS means that they eventually end up present in the environment. They are found in soil, air, surface and groundwater, wastewater, landfills, and even within the human body. While more than 7,800 types of PFAS have been discovered, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) are most commonly found in the U.S. These substances are the only two known carcinogens within the PFAS family, and have **NOT been found in LVMWD drinking water**.

As you know, LVMWD purchases 100% of our water supply from MWD who delivers it from the Sierra mountain snowpack through 400 miles of canals and aqueducts. After years of periodic testing and improvements in testing technology, MWD discovered one form of PFAS – perfluorohexanoic acid (PFHxA) – in the drinking water supply. This substance is **NOT** a known carcinogen and is not yet regulated in the U.S.

Legislation to regulate PFAS is currently in the works at both the state and federal levels. As testing and analytical methods continue to improve, so does our knowledge of these substances and their effects on humans. LVMWD is staffed with professionals who are committed to staying up to date on this information to ensure we continue to provide reliable water that meets or exceeds the strictest water quality standards in the nation. Our customers can rest assured knowing their taps deliver the highest quality water at the best value.



4232 LAS VIRGENES RD
CALABASAS, CA 91302

LVMWD CUSTOMER

2019 LVMWD WATER QUALITY REPORT PUBLISHED JUNE 2020

WATER QUALITY - THE SAME IN ANY LANGUAGE

This report contains important information about your drinking water.
Translate it or speak with someone who understands it.

SPANISH

Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.

HEBREW

הדו"ח הזה מכיל מידע חשוב לגבי מי השתייה שלך
תרגם את הדו"ח או דבר עם מישהו שמבין אותו

FARSI

تمپتوانید این اطلاع ترا بزبان انگلیسی
اطلاع ندیم، اگر چه به سبب محدودیت وقت، اگر
اگر برای شما به فارسی ترجمه کنند، این اطلاعیه شامل
بخوانید. از کسی که میتواند به فارسی برگرداند، بطلب

CHINESE

这份报告中有些重要的信息，
讲到关于您所在社区的水的品
质。请您找人翻译一下，或者
请能看得懂这份报告的朋友给
您解释一下。

JAPANESE

この資料には、あなたの飲料水
についての大切な情報が書かれ
ています。内容をよく理解する
ために、日本語に翻訳して読む
か説明を受けてください。

FOR MORE INFORMATION

LVMWD encourages you to stay informed about
your water. Sign up for eNotification at [LVMWD.com/
eNotification](http://LVMWD.com/eNotification) to receive information on a variety of
topics that interest you. Be sure to check the website
frequently for timely information on water conservation
and other topics.

The District publishes *The e-Current Flow* on our
website at LVMWD.com/e-Current-Flow. The customer
newsletter is also delivered with your bill.

The LVMWD Board of Directors meets at 9 a.m. on the
first and third Tuesday of each month. These meetings
are conducted at District Headquarters, 4232 Las
Virgenes Rd., in Calabasas, and are open to the public
and live streamed at LVMWD.com/LiveStream

If you wish to speak with someone about your water
service please contact us at (818) 251-2200 or e-mail
Customer_Service@LVMWD.com.

ADDITIONAL INFORMATION ABOUT DRINKING WATER SAFETY AND STANDARDS

CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY - STATE WATER RESOURCES CONTROL BOARD

1001 I St.
Sacramento, CA 95814
(916) 449-5577
waterboards.ca.gov/tiny/pws.shtml

U.S. ENVIRONMENTAL PROTECTION AGENCY (USEPA)

Office of Ground and Drinking Water
401 M St., SW
Washington, DC 20460
(800) 426-4791
epa.gov/safewater

U.S. CENTER FOR DISEASE CONTROL AND PREVENTION

1600 Clifton Rd.
Atlanta, GA 30333
(800) 311-3435
cdc.gov