60 Years of Service

Looking Back to Move Forward

Water Quality Report

In compliance with federal and state requirements, here is your
2017 Consumer Confidence Report

Published June 2018

Westlake Filtration Plant Filters

To the Las Virgenes Municipal Water District Community:

Each year Las Virgenes Municipal Water District (LVMWD) is required to share with you a report on the quality of water that we serve to the community. Through 2017, I am pleased to inform you, once again, the water we provide you meets or surpasses all state and federal water quality standards.

LVMWD is proud of the consistency of the water that is delivered to your homes and businesses. We go to great lengths to ensure that our infrastructure is well-maintained, and we employ a highly-skilled and proficient workforce so your water is of the highest quality and affordable.

The last few years challenged all of us to change both our perceptions and behavior regarding water and how we use it. With our weather patterns becoming more intense and variable due to climate change, long-term water reliability is a major focus. But we can't do this alone; we need your continued help. Your tireless efforts over the last few years have proven that conservation and efficient water use can be a *California Way of Life*.

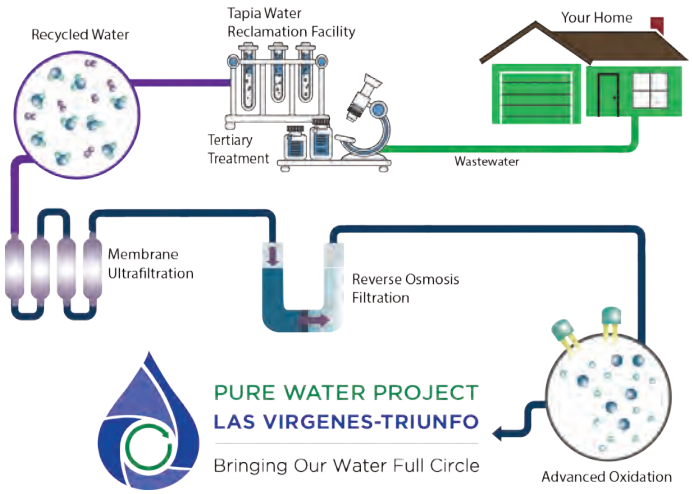
Moving forward, LVMWD will be diversifying its water portfolio through innovative technologies such as our Pure Water Project Las Virgenes-Triunfo. The project will take reclaimed water from the Tapia Water Reclamation Facility and treat it to drinking water standards to beneficially reuse it for potable consumption. This will help ensure that our communities and residents will consistently have water reliability well into the future, supplying up to 30% of our potable water demand.

This annual report is required by state and federal law, but please take a few minutes to use it as a resource.

In this report, you will find water quality data charts, water-saving tips and other District information that you may find helpful. I encourage you to read through it, and I also hope you will visit our website, LVMWD.com and follow us on Facebook, Twitter @lvmwd and Instagram @LasVirgenes_MWD.

Sincerely,

David W. Pedersen, P.E.
General Manager



Get Social

LVMWD is on social media and we want you to follow us. We post pictures, videos and subject matter on upcoming events or information that might be of interest to you. We use several social media platforms that are geared toward distributing messages to a variety of customers including Facebook, Twitter, Nextdoor, Instagram, YouTube and Pinterest.

Stay Informed

LVMWD recently updated its website to make it more user-friendly and easier to navigate. We are posting information regularly about upcoming events, rebates, compost, tours and other items that might be of interest to you and your family. Our bimonthly newsletter "The Current Flow" is also readily available on the new site.

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. In some cases, it can pick up polluted materials or substances resulting from the presence of animals or human activity.

Contaminants that 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, and 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 (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same public health protection.

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.

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 tests for lead at 30 different locations throughout the service area. Results show that the levels of lead in LVMWD's water are well within state and federal guidelines. (See the table on page 4 for details.)

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. State regulations now require water utilities to sample and test for lead in schools' water systems, if requested by a school. For 2017, no schools in LVMWD's service area have requested the testing for lead in the water. However, a total of 17 schools have requested testing in 2018 as of the date of this report.

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.

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 microbial contaminants are available by calling the Safe Drinking Water Hotline at (800) 426-4791.

How did we do in 2017? Water Quality Report

(based on data collected in 2017)

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	Jensen Plant	LVMWD	Major Sources in Drinking Water
Percent State Water Project (a)	%	NA	NA	NA	Range	60 - 100	60 - 100	NA
					Average	97	97	
CLARITY								
Combined Filter Effluent Turbidity (b)	NTU	TT	NA	NA	Highest	0.06	0.25	Soil runoff
	%				% ≤ 0.3	100	100	
MICROBIOLOGICAL								
Total Coliform Bacteria (c)	%	5.0	MCLG = 0	NA	Range	0	ND - 3.3	Naturally present in the environment
					Average		0.8	
Heterotrophic Plate Count (HPC) Bacteria (d)	CFU/mL	TT	NA	NA	Range	ND - 1	ND - 3500	Naturally present in the environment
					Median	ND	ND	
INORGANIC CHEMICALS								
Aluminum	ppb	1,000	600	50	Range	ND - 120	ND - 80	Residue from water treatment process; natural deposits erosion
					Highest RAA	89	57	
Arsenic	ppb	10	0.004	2	Range	ND - 2.4	ND - 2.3	Natural deposits erosion, glass and electronics production wastes
					Average	ND	2	
Fluoride (e)	ppm	2.0	1	0.1	Range	0.6 - 0.8	0.6	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
					Average	0.7	0.6	
Nitrate (as Nitrogen)	ppm	10	10	0.4	Range	0.6	0.6	Runoff and leaching from fertilizer use; leaching from septic tank and sewage; natural deposits erosion
					Average			
RADIOLOGICALS								
Gross Alpha Particle Activity	pCi/L	15	MCLG = 0	3	Range	ND - 3	ND	Erosion of natural deposits
					Average	ND	ND	
Uranium	pCi/L	20	0.43	1	Range	ND - 1	NA	Erosion of natural deposits
					Average	ND	NA	
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS AND DISINFECTION BYPRODUCT PRECURSORS								
Total Trihalomethanes (TTHM) - Plant Effluent	ppb	80	NA	1.0	Range	14 - 77	16 - 34	Byproduct of drinking water chlorination
					Average	22	26	
Haloacetic Acids (five) (HAA5) - Plant Effluent	ppb	60	NA	1.0	Range	4.7 - 6.4	ND - 9.9	Byproduct of drinking water chlorination
					Average	5.7	8.4	
Total Chlorine Residual	ppm	MRDL = 4.0	MRDLG = 4.0	NA	Range	1.1 - 3.1	ND - 3.0	Drinking water disinfectant added for treatment
					Highest RAA	2.4	0.2	
Bromate (f)	ppb	10	0.1	1.0	Range	3.3 - 8.9	NA	Byproduct of drinking water ozonation
					Highest RAA	7.4	NA	
Total Organic Carbon (TOC)	ppm	TT	NA	0.30	Range	2.3 - 3.1	3.0 - 4.1	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts
					Highest RAA	2.5	3.4	

Parameter	Year Sampled	Units	AL	PHG (MCLG) [MRDLG]	State DLR	90th Percentile	# Sites Sampled	# Sites Over AL	Exceeded AL Y/N	Major Sources in Drinking Water
INORGANIC CHEMICALS										
Lead (j)(k)	2017	ppb	15	0.2	5	5.0	31	0	N	House pipes internal corrosion; erosion of natural deposits
Copper (J)	2017	ppb	1300	300	50	230	31	0	N	House pipes internal corrosion; erosion of natural deposits

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Jensen Plant	LVMWD	Major Sources in Drinking Water
SECONDARY STANDARDS - Aesthetic Standards								
Aluminum (g)	ppb	200	600	50	Range	ND - 120	ND - 80	Residue from water treatment process; natural deposits erosion
					Highest RAA	89	57	
Chloride	ppm	500	NA	NA	Range	74 - 94	58 - 95	Runoff/leaching from natural deposits; seawater influence
					Average	84	74	
Color	Color Units	15	NA	NA	Range	1 - 2	ND - 10	Naturally-occurring organic materials
					Average	2	ND	
Odor Threshold	TON	3	NA	1	Range	2	ND - 2	Naturally-occurring organic materials
					Average		ND	
Specific Conductance	µS/cm	1,600	NA	NA	Range	557 - 626	470 - 650	Substances that form ions in water; seawater influence
					Average	592	560	
Sulfate	ppm	500	NA	0.5	Range	61 - 78	50 - 68	Runoff/leaching from natural deposits; industrial wastes
					Average	70	59	
Total Dissolved Solids (TDS)	ppm	1,000	NA	NA	Range	316 - 373	260 - 340	Runoff/leaching from natural deposits
					Average	344	302	
OTHER PARAMETERS								
General Minerals								
Alkalinity (as CaCO3)	ppm	NA	NA	NA	Range	85 - 86	76 - 95	Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, silicate and phosphate
					Average	86	85	
Calcium	ppm	NA	NA	NA	Range	27	23 - 26	Runoff/leaching from natural deposits
					Average		25	
Hardness (as CaCO3)	ppm	NA	NA	NA	Range	118 - 120	100 -120	Runoff/leaching from natural deposits; sum of polyvalent cations, generally magnesium and calcium present in the water
					Average	119	110	
Magnesium	ppm	NA	NA	NA	Range	12 - 14	10 - 14	Runoff/leaching from natural deposits
					Average	13	12	
Potassium	ppm	NA	NA	NA	Range	3.1 - 3.2	NA	Salt present in the water; naturally-occurring
					Average	3.2	NA	
Sodium	ppm	NA	NA	NA	Range	58 - 80	48 -74	Salt present in the water; naturally-occurring
					Average	69	62	
Unregulated Contaminants								
Boron	ppb	NL = 1,000	NA	100	Range	190	NA	Runoff/leaching from natural deposits; industrial wastes
					Average			
N-Nitrosodimethylamine (NDMA)	ppt	NL = 10	3	2	Range	ND - 3.2	NA	Byproduct of drinking water chloramination; industrial processes
Vanadium	ppb	NL = 50	NA	3	Range	4.0	NA	Naturally-occurring; industrial waste discharge
					Average			
Miscellaneous								
Chlorate	ppb	NL = 800	NA	20	Range	28	NA	Byproduct of drinking water chlorination; industrial processes
					Average			
Corrosivity (as Aggressiveness Index) (h)	AI	NA	NA	NA	Range	12.0 - 12.1	NA	Elemental balance in water; affected by temperature, other factors
					Average	12.0	NA	
Corrosivity (as Saturation Index) (i)	SI	NA	NA	NA	Range	0.15 - 0.26	- 0.16 - 0.34	Elemental balance in water; affected by temperature, other factors
					Average	0.20	0.14	
pH	pH Units	NA	NA	NA	Range	8.2 - 8.3	6.8 - 9.4	NA
					Average	8.3	8.0	

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 faucet. While the information in these tables is important, what you don't see is also significant. Water agencies are only required to report contaminants that are detected; none were found at levels considered to be unsafe or unhealthy.

Testing results are presented for the Jensen Water Treatment Plant operated by the Metropolitan Water District of Southern California (MWD) and for LVMWD's water delivery system. If 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."

Abbreviations and Footnotes

Abbreviations and Terms ~ Definitions and explanations to help you understand the charts	
AI	Aggressiveness Index
AL	Action Level
CaCO3	Calcium Carbonate
CDPH	California Department of Public Health
CFU	Colony-Forming Units
DBP	Disinfection Byproducts
DLR	Detection Limits for Purposes of Reporting
LRAA	Locational Running Annual Average; highest LRAA is the highest of all Locational Running Annual Averages calculated as 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
N	Nitrogen
NA	Not Applicable
ND	Not Detected
NL	Notification Level to SWRCB
NTU	Nephelometric Turbidity Units
pCi/L	picoCuries per Liter
PHG	Public Health Goal
ppb	parts per billion or micrograms per liter (µg/L)
ppm	parts per million or milligrams per liter (mg/L)
ppt	parts per trillion or nanograms per liter (ng/L)
ppq	parts per quadrillion or picgrams per liter (pg/L)
RAA	Running Annual Average; highest RAA is the highest of all Running Annual Averages calculated as 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 for samples collected once or twice annually
SI	Saturation Index (Langelier)
SWRCB	State Water Resources Control Board
TON	Threshold Odor Number
TT	Treatment Technique is a required process intended to reduce the level of a contaminant in drinking water
µS/cm	microSiemen per centimeter; or micromho per centimeter (µmho/cm)

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 MWD. LVMWD is one of MWD's 26 member agencies.

Your water is one of the most tested and monitored substances you consume. This report conveys the results of tests conducted in 2017. 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 waters 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.

(Source: MWD)

Footnotes	
(a)	The Jensen Treatment Plant treated Los Angeles Aqueduct water during the months of March and June 2017.
(b)	For the Jensen plant, the turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceen 1 NTU at any time. For the Westlake Filtration Plant, the turbidity level of the filtered water shall be less than or equal to 0.5 NTU in 95% of the measurements taken each month and shall not exceed 5.0 NTU at any time. Turbidity is a measure of the cloudiness of the water and is an indicator of treatment performance. The averages and ranges of turbidity shown in the Secondary standards were based on the treatment of plant effluent.
(c)	State Total Coliform Rule (TCR) - No more than 5.0% total coliform-positive samples in a month: Compliance is based on the monthly combined distribution system sampling from all treatment plants. Nine total coliform-positive samples were found out of the 1188 samples analyzed in 2017. The MCL was not violated.
(d)	All MWD distribution system samples had detectable total chlorine residuals and no HPC was required. However, plant effluents' HPC were analyzed to ensure chlorine disinfection. HPC reporting level is 1 CFU/mL. Values are based on monthly median per state guidelines and recommendations.
(e)	MWD was in compliance with all provisions of the State's Fluoridation System Requirements.
(f)	No MCL exceedance occurred. Compliance with the State and Federal Bromate MCL is based on RAA.
(g)	No MCL exceedance occurred. Compliance with the State Aluminum MCL is based on RAA.
(h)	AI (greater than or equal to) 12.0 = Non-aggressive water. AL (10.0 - 11.9) = Moderately aggressive water. AI (less than or equal to) 10.0 = Highly aggressive water. *Reference: ANSI/AWWA Standard C400-93 (R98)*
(i)	Positive SI index = non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative SI index = 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.
(k)	No schools requested testing for lead in 2017.

Water Conservation ~ Working Together

With drought conditions seemingly always around the corner, how we use our water is becoming increasingly more important. Efficient and deliberate use of this precious resource is the new normal and there are no alternatives. At LVMWD we understand that sometimes it can appear to be a daunting task to shave water usage units from your bill, so that's why we are here to help you.

Some of the ways we can assist are:

Rebates – Indoor and outdoor water-saving opportunities are available at LVMWD.com/Rebates

Classes – LVMWD offers classes on drought tolerant gardening techniques and plant selection. Sign up for eNotifications at LVMWD.com/eNotifications

Water Use Surveys – We love helping you save water. Trained staff will meet with you to survey your property for irrigation inefficiencies, help discover leaks and give advice on how to have a more water efficient property, inside and out.

Contact Customer Service at (818) 251-2200.

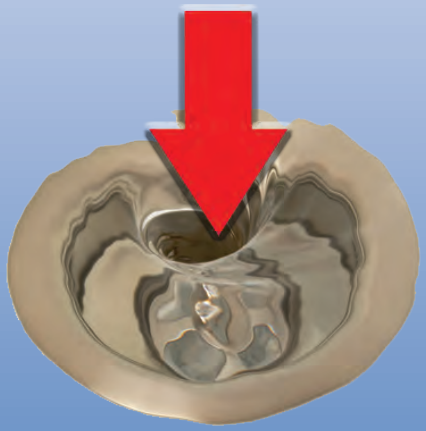
Some of the ways you can help are:

- ✓ Installing newer, high-efficiency toilets that use 1.28 gallons per flush (or less).
- ✓ Replacing older washing machines with a high-efficiency model.
- ✓ Using a water-efficient shower head and taking showers instead of baths.
- ✓ Only washing full loads of laundry and dishes.
- ✓ Fixing leaking faucets and toilets.
- ✓ Shutting off the water when brushing teeth or shaving.

Protecting Water Resources

Protecting our water resources is everyone's responsibility. We can do this by:

- ☑ Eliminating excess use of lawn and garden fertilizers and pesticides–they contain hazardous chemicals that can reach drinking water sources.
- ☑ Picking up pet waste and properly disposing of it in a trash can.
- ☑ If you have a septic system, properly maintaining it to reduce leaching to water sources.
- ☑ Do not allow irrigation to drain off your property.
- ☑ Disposing of chemicals properly. For example, take used paint or motor oil to a hazardous waste collection center.
- ☑ Volunteering to protect your local watershed. Visit epa.gov/hwp for more information.
- ☑ Not flushing unused or expired pharmaceuticals down the drain. Find a collection event or take them to the Lost Hills Sheriff's Station, 27050 Agoura Rd., in Calabasas. (Individual parties only–not intended for commercial use.)



4232 Las Virgenes Rd
Calabasas, CA 91302

LVMWD Customer

2017 LVMWD ~ Water Quality Report

Published June 2018

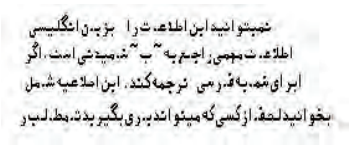
Water Quality - the same in any language

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.

Farsi



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。

Hebrew

For More Information

LVMWD encourages you to stay informed about your water. Sign up for eNotification at 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 5 p.m. on the second and fourth Tuesday of each month. These meetings are conducted at District Headquarters, 4232 Las Virgenes Rd., in Calabasas, and are open to the public.

If you wish to speak with someone about your water service, contact Darrell Johnson, Customer Service Manager 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