Las Virgenes Municipal Water District

In compliance with federal and
state requirements, here is your
2018 Consumer Confidence Report.

2018
WATER QUALITY REPORT

To the Las Virgenes Municipal Water District Community

As your water utility, our top priority is to reliably deliver safe, clean, healthy and affordable water to your homes and businesses. Since 1958, our agency has embraced innovation and environmental stewardship to balance our core mission with the need to protect the integrity of our local ecosystem. Along with the Las Virgenes – Triunfo Joint Powers Authority (Las Virgenes Municipal Water District and the Triunfo Water and Sanitation District), we are a full-service water and wastewater provider for most of the Conejo Valley. Through the years, we have taken strides to minimize costs and the byproducts of our essential services, keeping water rates low and finding new markets to beneficially reuse recycled water and biosolids for our community.

In the late 1970s, we were one of the first agencies to build and distribute recycled water to use for outdoor irrigation purposes for parks, sports fields and median strips. In the 1990s, we built and began operating the Rancho Las Virgenes Composting Facility to dispose of our biosolids by creating a nutrient rich, free compost for the community.

We built a one-megawatt solar field and are in the process of expanding it to five megawatts to help offset the electrical costs of pumping water uphill for gravity fed distribution. While we are proud of these accomplishments and they have helped customers in our service area, there is more work to be done.

With our global environment constantly under assault from human influences like pollution, climate change and finite resources, our core efforts are pushing us down another path to create a new, local source of drinking water. In another effort to treat wastewater as a resource rather than a waste product, we are moving forward with the Pure Water Project Las Virgenes – Triunfo. This initiative will take surplus recycled water that is normally discharged to Malibu Creek and use proven technology to create a local drinking water supply. This will account for up to 15% of our potable drinking water supply and will reduce our reliance on importing 100% of our drinking water.

With new challenges always come new solutions. We will continue to address them the same way we always have with high-quality customer service, a highly-skilled and well trained workforce, cutting-edge technology and processes and a mindset on the communities we serve and the environment that sustains us. Thank you to our residents, cities and businesses for embracing change and allowing us to be your water service provider.

Sincerely,

David W. Pedersen

David W. Pedersen, P.E.
General Manager

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 one of the most tested and monitored substances you consume. This report conveys the results of tests conducted in 2018. 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.

LV TAP
DRINK FROM THE SINK

Annually, LVMWD performs extensive state-mandated testing for water quality contaminants by collecting over 1,200 samples, taken from various locations throughout the drinking water conveyance system, and routinely conducts over **11,000 laboratory analyses** on those samples at state-certified water quality labs.

These daily tests are conducted by our **highly trained and skilled LVMWD professional staff** to ensure that your water is safe to drink. In California, water utilities are required by the State Water Resources Control Board and the Division of Drinking Water to undergo arguably the most stringent and comprehensive water quality testing in the United States, if not the world. Like always, LVMWD **met or exceeded all of the standards** for safe and high quality drinking water as established by the state.

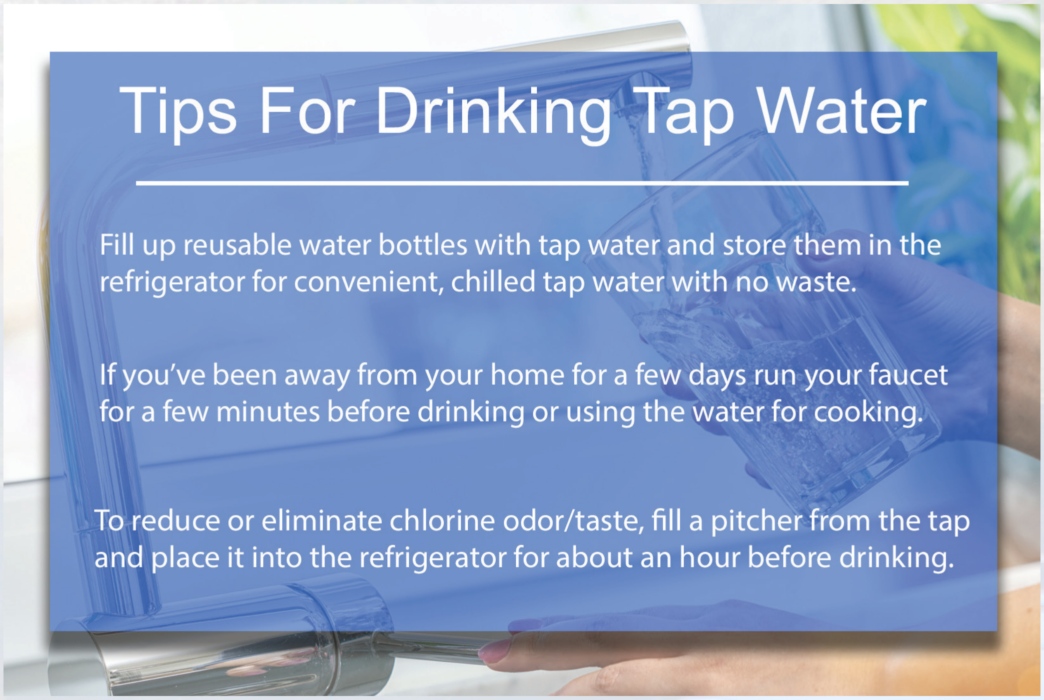
LVMWD conducted a recent survey to better understand water preferences and the perceptions of tap water versus bottled water of our customers. **Over 68 percent of respondents routinely drink tap water** albeit 60 percent of these customers filter the water first (i.e. Britta Filter). These customers primarily preferred tap water because it was **convenient** (41%), was **better for the environment** (24%) or was **more cost effective** (18%).

When you turn the faucet on, the water flows. At LVMWD, we utilize an extremely **experienced and dedicated staff** to manage and maintain our potable water distribution system. Routine maintenance protocols, emergency responses and timely repairs ensure that delicious and safe LV Tap water is reliably delivered into our customer’s home 24/7.

Tap water is **extremely affordable**. For instance, one gallon of LVMWD tap water costs less than a penny delivered to your home from the Sierra Nevada Mountains over 400 miles away. In comparison, the same amount of bottled water can easily exceed $1, or 100 times the cost. Foregoing bottled water and drinking from the sink can result in significant savings for LVMWD customers.

Tap water is the most **sustainable** drinking water product available. Tremendous amounts of plastic waste pile up in in landfills and oceans as a result from the manufacturing and sale of single-use bottled water. According to research on the subject, humans on this planet collectively purchase **one million single-use plastic bottles every minute**, 91 percent of which do not get recycled (*Trevor Nace, “We’re Now At a Million Plastic Bottles Per Minute – 91% of which are not Recycled”, www.forbes.com, 26 July, 2017, 5/28/19*). For those single-use plastic bottles that are neither recycled nor placed in landfills, they end up in the environment where they are a **visual blight and harmful to wildlife**.

LV Tap is our initiative to highlight the benefits tap water presents for our customers and the communities we serve. Delivering safe, high quality drinking water reliably to our customers is our mission and LV Tap is an expression of that dedication. So when you are thirsty, join the majority of our community and experience the **affordability, sustainability and convenience LV Tap delivers when you “drink from the sink.”**



Tips For Drinking Tap Water

Fill up reusable water bottles with tap water and store them in the refrigerator for convenient, chilled tap water with no waste.

If you’ve been away from your home for a few days run your faucet for a few minutes before drinking or using the water for cooking.

To reduce or eliminate chlorine odor/taste, fill a pitcher from the tap and place it into the refrigerator for about an hour before drinking.

HOW DID WE DO IN 2018? WATER QUALITY REPORT

(BASED ON WATER SAMPLED IN 2018)

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 2018	LVMWD 2018	Major Sources in Drinking Water
Percent State Water Project	%	NA	NA	NA	Range	100	100	NA
					Average			
CLARITY								
Combined Filter Effluent (CFE) Turbidity (a)	NTU	TT	NA	NA	Highest	0.06	0.30	Soil runoff
	%				% ≤ 0.3	100	100	
MICROBIOLOGICAL								
Total Coliform Bacteria (b)	% Positive Monthly Samples	5.0	MCLG = 0	NA	Range	0–0.3	0-2.1	Naturally present in the environment
		(TT)			Average	0.1	0.8	
Heterotrophic Plate Count (HPC) Bacteria (c)	CFU/mL	TT	NA	(1)	Range	ND	ND - 1500	Naturally present in the environment
					Median		ND	
INORGANIC CHEMICALS								
Aluminum	ppb	1,000	600	50	Range	ND–75	ND–58	Residue from water treatment process; natural deposits erosion
					Highest RAA	ND	ND	
Fluoride (d)	ppm	2.0	1	0.1	Range	0.4–0.8	0.6-0.9	Erosion of 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	Range	0.5	0.4-0.5	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion
					Average		0.4	
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		
DISINFECTION BYPRODUCTS, DISINFECTANT RESIDUALS, AND DISINFECTION BYPRODUCT PRECURSORS (e)								
Total Trihalomethanes (TTHM)	ppb	80	NA	1.0	Range	11–28	10-160	Byproduct of drinking water chlorination
					Highest LRAA	23	49	
Sum of Five Haloacetic Acids (HAA5)	ppb	60	NA	1.0	Range	1.5–5.0	ND-47	Byproduct of drinking water chlorination
					Highest LRAA	6.0	14.9	
Total Chlorine Residual	ppm	MRDL = 4.0	MRDL = 4.0	(0.05)	Range	1.4–2.9	ND-3.4	Drinking water disinfectant added for treatment
					Highest RAA	2.4	1.8	
Bromate	ppb	10	0.1	1.0	Range	ND–6.4	NA	Byproduct of drinking water ozonation
					Highest RAA	5.2		
Total Organic Carbon (TOC)	ppm	TT	NA	0.30	Range	2.0–2.6	3.5-4.7	Various natural and man-made sources; TOC is a precursor for the formation of disinfection byproducts
					Highest RAA	2.6	3.9	

Parameter	Units	State or Federal MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Jensen Plant 2018	LVMWD 2018	Major Sources in Drinking Water
SECONDARY STANDARDS—AESTHETIC STANDARDS								
Aluminum	ppb	200	600	50	Range	ND–75	ND-58	Residue from water treatment process; natural deposits erosion
					Highest RAA	ND	ND	
Chloride	ppm	500	NA	(2)	Range	54–57	55-120	Runoff/leaching from natural deposits; seawater influence
					Average	56	74	
Color	Color Units	15	NA	(1)	Range	ND–1	ND-58	Naturally-occurring organic materials
					Average	ND	ND	
Odor Threshold (f)	TON	3	NA	1	Range	1–4	ND-2	Naturally-occurring organic materials
					Average	2	ND	
Specific Conductance	µS/cm	1,600	NA	NA	Range	428–444	375-453	Substances that form ions in water; seawater influence
					Average	436	437	
Sulfate	ppm	500	NA	0.5	Range	43–46	47-92	Runoff/leaching from natural deposits; industrial wastes
					Average	44	60	
Total Dissolved Solids (TDS)	ppm	1,000	NA	(2)	Range	239–244	220-470	Runoff/leaching from natural deposits
					Average	242	298	
GENERAL MINERALS								
Alkalinity (as CaCO3)	ppm	NA	NA	(1)	Range	68–76	66-102	Runoff/leaching of natural deposits; carbonate, bicarbonate, hydroxide, and occasionally borate, silicate, and phosphate
					Average	72	77	
Calcium	ppm	NA	NA	(0.1)	Range	19–21	21-26	Runoff/leaching from natural deposits
					Average	20	23	
Hardness (as CaCO3)	ppm	NA	NA	(1)	Range	84–94	93-172	Runoff/leaching from natural deposits; sum of polyvalent cations, generally magnesium and calcium present in the water
					Average	89	115	
Magnesium	ppm	NA	NA	(0.01)	Range	9.5–9.9	9.6-18.5	Runoff/leaching from natural deposits
					Average	9.7	12	
Potassium	ppm	NA	NA	(0.2)	Range	2.4–2.5	NA	Salt present in the water; naturally-occurring
					Average	2.4		
Sodium	ppm	NA	NA	(1)	Range	45–46	43-88	Salt present in the water; naturally-occurring
					Average	46	56	
UNREGULATED CONTAMINANTS								
Boron (k)	ppb	NL = 1,000	NA	100	Range	140	NA	Runoff/leaching from natural deposits; industrial wastes
					Average			
MISCELLANEOUS								
Calcium Carbonate Precipitation Potential (CCPP) (as CaCO3) (g)	ppm	NA	NA	NA	Range	1.0–1.9	NA	Elemental balance in water; affected by temperature, other factors
					Average	1.4		
Chlorate	ppb	NL = 800	NA	20	Range	29	NA	Byproduct of drinking water chlorination; industrial processes
					Average			
Corrosivity (as Aggressiveness Index) (h)	AI	NA	NA	NA	Range	12	NA	Elemental balance in water; affected by temperature, other factors
					Average			
Corrosivity (as Saturation Index) (i)	SI	NA	NA	NA	Range	0.26 -0.28	0.001 - 0.51	Elemental balance in water; affected by temperature, other factors
					Average	0.27	0.18	
N-Nitrosodimethylamine (NDMA)	ppt	NL= 10	3	(20.)	Range	ND - 3.2	NA	Byproduct of drinking water chloramination; industrial processes
pH	pH Units	NA	NA	NA	Range	8.4 - 8.5	6.8 - 9.8	NA
					Average	8.5	8.0	

Parameter	Year Sampled	Units	AL	PHG (MCLG) [MRDLG]	State DLR	90th Percentile 2018	# Sites Sampled 2018	# Sites Over AL 2018	Exceeded AL Y/N	Major Sources in Drinking Water
INORGANIC CHEMICALS										
Lead (j)	2018	ppb	15	0.2	5	5.0	31	0	N	House pipes internal corrosion; erosion of natural deposits
Copper (j)	2018	ppb	1300	300	50	230	31	0	N	House pipes internal corrosion; erosion of natural deposits

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. While this information is important, what you don't see is also significant because 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- 2100, 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
CaCO3	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
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

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)	All MWD distribution system samples had detectable total chlorine residuals, so no HPC was required.
(d)	MWD was in compliance with all provisions of the State's fluoridation system requirements.
(e)	Compliance with the State and Federal MCLs is based on RAA or LRAA, as appropriate.
(f)	Compliance with odor threshold secondary MCL is based on RAA.
(g)	Positive CCPP=non-corrosive; tendency to precipitate and/or deposit scale on pipes. Negative CCPP=corrosive; tendency to dissolve calcium carbonate.
(h)	AI ≥ 12.0=Non-aggressive water; AI 10.0–11.9=Moderately aggressive water; AI ≤ 10.0=Highly aggressive water.
(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 2018 to determine the 90th percentile and none exceeded the action level.
(k)	Boron, an unregulated contaminate, was detected at 140 ppb, which was less than the MCL

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, 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. SWRCB regulations also establish limits for contaminants in bottled water to 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.

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.

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 5 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.

During 2018, LVMWD completed state mandated sampling and testing for lead at all 13 pubic schools within our service area. All schools passed and tested below the limit for lead.

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.

LAS VIRGENES MUNICIPAL WATER DISTRICT
EST. 1958
4232 LAS VIRGENES RD
CALABASAS, CA 91302

LVMWD Customer

2018 LVMWD ~ WATER QUALITY REPORT

PUBLISHED JUNE 2019

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

نمیتوانید این اطلاعات را بزبان انگلیسی
اطلاعات مهمی راجع به آب آشامیدنی است. اگر
برای شما به فارسی ترجمه کنند. این اطلاعیه شامل
بخوانید لطفا از کسی که میتواند یاری بگیرید تا مطالب را

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 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 beginning in August. 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/BoardMeetingSpeakerCard

If you wish to speak with someone about your water service please contact Customer Service 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