

LADWP

Water Quality Report



Overview

LADWP Water Meets or Surpasses All Water Quality Standards



I am pleased to report that LADWP consistently provided the City of Los Angeles with high quality drinking water in the year 2006. Last year, all 227 billion gallons of water supplied to the 4 million residents of Los Angeles met or surpassed all health-based drinking water standards. These standards are set by the U.S. Environmental Protection Agency (EPA) and the State of California Department of Health Services (CDHS) Drinking Water Program.

LADWP achieves this high quality water by protecting our water sources, using state-of-the-art water treatment processes, prudently maintaining and operating our facilities, and vigilantly monitoring and testing the water we serve. In 2006, LADWP conducted more than 307,300 field and laboratory tests on over 23,000 samples collected throughout the year for both regulated contaminants such as arsenic, chromium, lead, and disinfection by-products, as well as contaminants such as chromium 6 and perchlorate that are not yet regulated.

This report summarizes the results of those water quality tests and provides specific information about the quality of the water served in your neighborhood. Its purpose is to help you to make informed choices about the water you drink. In addition, this year's report spotlights some of the employees who work to ensure the high quality of your water and other information we hope you will find useful and interesting.

I would also like to take this opportunity to thank you for your water conservation efforts, and urge continued diligence during this extremely dry and potentially very warm summer.

-- H. David Nahai, President, Board of Water and Power Commissioners



Table of Contents

Overview	2
Drinking Water and Your Health	3
Health-Related Notices	3
Water Treatment	4
Water Quality in Your Area	5
Sources of Water for Your Community	5
How to Read the Tables	6
2006 Water Quality Monitoring Results	6-9
Water Quality News	10-11
Research on Disinfection By-Products	
Update on Surface Water Treatment Rule	
Cryptosporidium	
Radon	
Drinking Water Source Assessment	
Contact Information	Back Page

Our mission is to provide our customers with reliable, high quality, and competitively priced water services in a safe, publicly and environmentally responsible manner.

Drinking Water and Your Health

Notice from the EPA

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Why? Because 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 in some cases, radioactive materials, and can pick up substances resulting from the presence of animal or human activity.

However, the presence of contaminants does not necessarily indicate that the water poses a health risk.

In order to ensure that tap water is safe to drink, the EPA and the CDHS enforce regulations that limit the amount of certain contaminants in water provided by public water systems. CDHS regulations also establish limits for the same contaminants in bottled water to ensure the same protection for the public.

Contaminants that may be present in source waters 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, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, and mining or farming.

Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

Organic chemical contaminants, including synthetic and volatile chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

Pesticides and herbicides that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Learn more about contaminants and potential health effects by calling EPA's Safe Drinking Water Hotline at (800) 426-4791 or visiting its website at www.epa.gov.

Your health

Health-Related Notices

Precautions for People with Weakened Immune Systems

Some people may be more vulnerable to contaminants in drinking water than the general population. People with weakened immune systems may have undergone chemotherapy treatment, received organ transplants, suffer from HIV/AIDS, or other immune system disorders. Some elderly and infants can be particularly at risk from infection. People with these types of health challenges should seek advice about drinking water from their health care providers. Guidelines from the EPA and Centers for Disease Control (CDC) offer ways to lessen the risk of infection by Cryptosporidium and other microbial contaminants. These are available at no cost by contacting the EPA's Safe Drinking Water Hotline at (800) 426-4791, or visiting its website at www.epa.gov.

Sensitivity to Chlorine and Chloramines

LADWP is gradually switching from chlorine to chloramines as its disinfectant, though customers should expect to receive both types of treatment in their water at any time. Both chlorine and chloramines are effective killers of bacteria and other microorganisms, but chloramines form less disinfection by-products and have no odor when used properly.

People who use kidney dialysis machines may want to take special precautions and consult their physician for the appropriate type of water treatment. Customers who maintain fish ponds, tanks or aquaria should also make necessary adjustments in water quality treatment, as these disinfectants are toxic to fish. For further information, please visit www.ladwp.com/water, click on water quality, then click on "Constituents & Hot Topics."

Customers who maintain fish ponds, tanks or aquaria should make necessary adjustments

Protecting Water Quality at the Source



Did you know that about half of all water served to LADWP customers begins as snowmelt in the Eastern Sierra? This pure, natural runoff from the Eastern Sierra slopes feeds the Los Angeles Aqueduct that delivers drinking water to Los Angeles.

Protecting this water at its source is one of the most important factors in assuring the highest possible water quality for the City of Los Angeles. LADWP works to protect the quality of our water by diligently managing the natural resources of the Eastern Sierra/Owens Valley watershed.

LADWP leases about 80 percent of its land in the Owens Valley, and ensures that at least 75 percent of that land remains undeveloped and open to the public for recreational use. To protect the watershed, policies allow camping, fishing and other recreational activities only in designated areas. LADWP also has worked closely with ranchers and farmers to develop grazing and agricultural strategies that protect the watershed by preventing soil erosion and promoting vegetation.

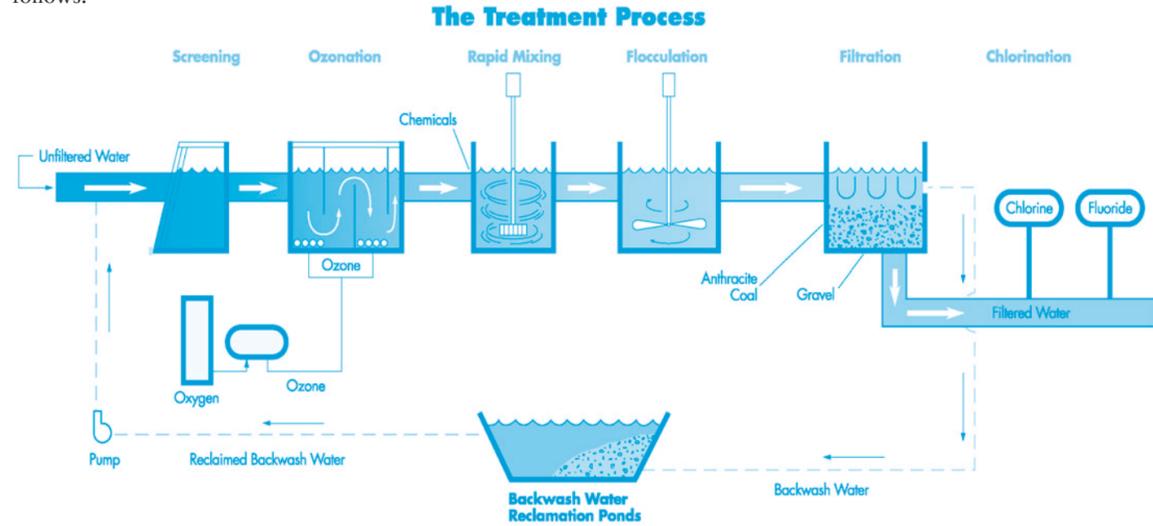
Here are some ways you can help protect water quality at the source when visiting the Eastern Sierra and Owens Valley.

- Use designated restrooms and trash cans.
- When in the backcountry, pack out all trash and waste.
- Use established dump stations for RVs and trailers.
- Never dispose of trash, motor oil, detergents, or other chemicals by burying in the ground.
- Corral pack animals more than 200 feet from any stream or river.
- If fishing, clean your equipment to prevent the spread of harmful non-native species such as the New Zealand mudsnail.

Water treatment

Surface Water Treatment

All water coming from the Los Angeles Aqueduct, the California Aqueduct, and the Colorado River Aqueduct is filtered and treated to ensure a safe drinking water supply. At the Los Angeles Aqueduct Filtration Plant, water is treated as follows:



Water flows into the filtration plant by gravity and travels through a screener to remove environmental debris such as twigs and dead leaves. The process injects ozone, a super-charged oxygen molecule and a powerful disinfecting agent into the water to destroy bacteria and other impurities that affect taste, odor and color. Chemicals are quickly dispersed into the water to make fine particles called floc. A 6-foot-deep filter (crushed coal over gravel) then removes the floc and previously added chemicals. Chlorine added during the final step ensures lasting disinfection and protects the water as it travels through the City's distribution system.

Groundwater Treatment

The City's vast groundwater supply in the San Fernando Valley and Central Basin are generally clean and clear.

However, LADWP also disinfects this groundwater with chlorine as a safeguard against microorganisms.

Because of a history of contaminants found in the San Fernando Valley groundwater wells, LADWP adheres to strict operating limits to keep TCE, PCE, hexavalent chromium, perchlorate and nitrates far below the maximum contaminant levels (MCLs) permitted by federal or state regulations. This provides an additional safety margin for City customers. Additionally, blending allows the use of wells that would be otherwise unavailable. In the long term, additional well field treatment will become necessary. LADWP is formulating a comprehensive groundwater treatment plan for the San Fernando Basin that will address current and future contaminants of concern.

Spotlight: To Filter Or Not To Filter...

One of the most frequent questions we hear from customers is: "Do water filters work and should I use one?"

You probably do not need to use a water filter. The City water delivered to your water meter by LADWP meets all State and Federal drinking water standards and is clear, taste great and is safe to drink. That said, however, LADWP is not responsible for plumbing on private property. Sub-standard, illegal, old, improperly installed and/or improperly maintained plumbing may adversely affect the quality appearance or taste of water coming from the tap inside your home or business. If your plumbing is causing a water quality problem, a low-cost, point-of-use filter can improve the water quality; however, a better solution is to correct the bad plumbing causing the poor water quality in the first place.

As with most products, some filters work better than others and some do not work at all. There are many types of filters available, each type works differently and will remove different substances from the water. It

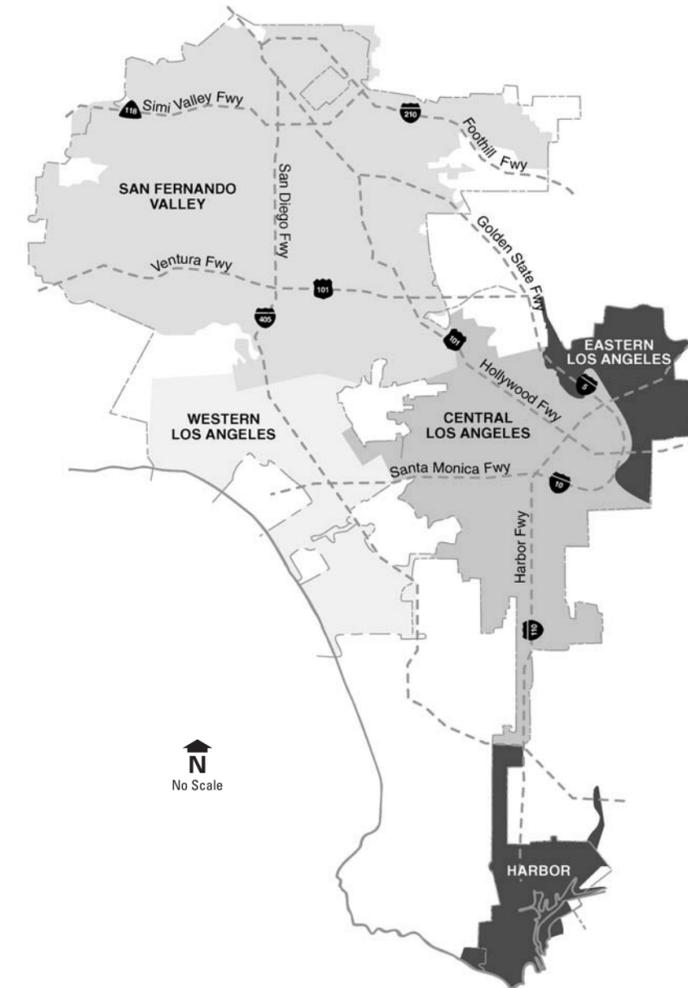
is helpful to know exactly why you want to filter the water before you speak to a seller of water treatment devices because that may help determine the type of filter that will best resolve the problem.

There are several resources available that can help you select a filter that works properly and meets your needs, including:

- *Consumer Reports Magazine* and Web site
- The National Sanitation Foundation (NSF), which maintains a list of approved water treatment devices, (800) 673-6275, e-mail: info@nsf.org.
- The Pacific Water Quality Association, an association of manufacturers and marketers of water treatment devices, (760) 644-7348, e-mail: info@pwqa.org.

Please note: If you do install a water filter, follow the operating and maintenance instructions very carefully. An improperly installed and/or maintained filter can adversely affect the quality of your water.

Water Quality In Your Area



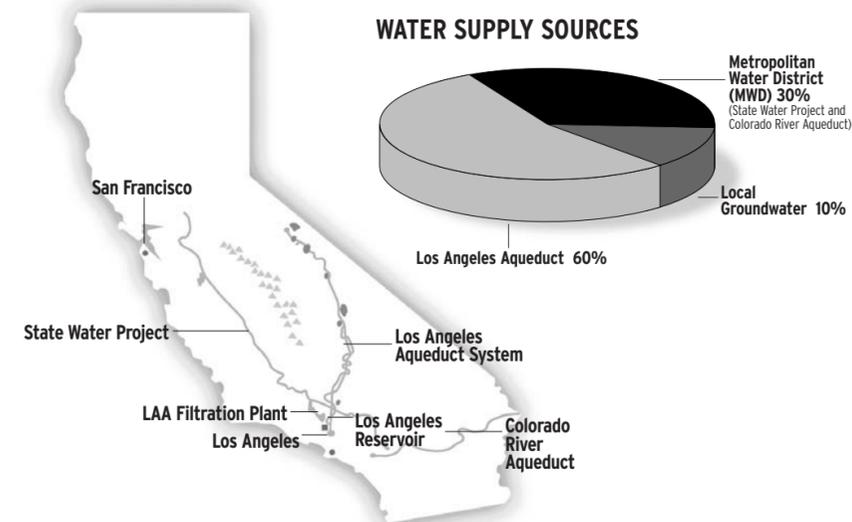
Where L.A.'s Water Comes From

San Fernando Valley: Los Angeles Aqueduct, local groundwater, and MWD State Water Project.

Central Los Angeles: Los Angeles Aqueduct, MWD State Water Project, and local groundwater.

Western Los Angeles: Los Angeles Aqueduct and MWD State Water Project.

Harbor/Eastern Los Angeles: MWD State Water Project and Colorado River Aqueduct.



Communities

San Fernando Valley Communities

- | | |
|-------------------|----------------|
| Arleta | Reseda |
| Canoga Park | Sherman Oaks |
| Chatsworth | Studio City |
| Encino | Sun Valley |
| Granada Hills | Sunland |
| Hollywood Hills | Sylmar |
| Lake View Terrace | Tarzana |
| Mission Hills | Toluca Lake |
| North Hills | Tujunga |
| North Hollywood | Valley Village |
| Northridge | Van Nuys |
| Olive View | Warner Center |
| Pacoima | West Hills |
| Panorama City | Winnetka |
| Porter Ranch | Woodland Hills |

Central Los Angeles Communities

- | | |
|--------------------------|---------------------------|
| Baldwin Hills | Little Tokyo |
| Chinatown | Los Feliz |
| Country Club Park | Mid City |
| Crenshaw | Mt. Olympus |
| Griffith Park | Park La Brea |
| Hancock Park | Rancho Park |
| Hollywood | Silverlake |
| Hyde Park | Watts |
| Koreatown | West Hollywood (parts of) |
| LA City Strip (parts of) | Westlake |

Western Los Angeles Communities

- | | |
|------------------------|---------------------|
| Bel Air Estates | Pacific Palisades |
| Beverly Glen | Palisades Highlands |
| Brentwood | Palms |
| Castellamare | Playa del Rey |
| Century City | Sawtelle |
| Cheviot Hills | Venice |
| Culver City (parts of) | West Los Angeles |
| Mar Vista | Westchester |
| | Westwood |

Eastern Los Angeles Communities

- | | |
|-----------------|-------------------|
| Atwater Village | Glassell Park |
| Boyle Heights | Highland Park |
| Cypress Park | Lincoln Heights |
| Eagle Rock | Montecito Heights |
| Echo Park | Monterey Hills |
| El Sereno | Mt. Washington |

Harbor Communities

- | | |
|----------------------------------|--------------------------|
| East San Pedro (Terminal Island) | LA City Strip (parts of) |
| Harbor City | San Pedro |
| Harbor Gateway (parts of) | Wilmington |

Report for All Water Quality Areas

Tables I-III list the results of water tests performed by LADWP and MWD from January to December 2006. These tables include only contaminants with values that are equal to or greater than the limit of detection.

How to Read the Tables

The constituents/contaminants found in the water served in your area are listed as follows:

- **For San Fernando Valley Area** – water test results are under the Los Angeles Aqueduct Filtration Plant, the Northern Combined Wells, and MWD Jensen Filtration Plant columns
- **For Western Los Angeles Area** – water test results are under the Los Angeles Aqueduct Filtration Plant column
- **For Central Los Angeles Area** – water test results are under the Los Angeles Aqueduct Filtration Plant and the Southern Combined Wells columns
- **For Harbor/Eastern Los Angeles Area** – water test results are under the MWD Jensen, Weymouth, and Diemer Filtration Plants columns

Some constituents/contaminants detected are reported on a **citywide basis** as required by the California Department of Health Services. The unregulated contaminants reported on an **area-wide basis** are included for additional information on the water served in your area.

Calendar Year 2006 Water Quality Monitoring Results

TABLE I - HEALTH-BASED PRIMARY DRINKING WATER STANDARDS CONTAMINANTS DETECTED IN TREATED WATER

Contaminants	Units	Los Angeles Filtration Plant		Northern Combined Wells		Southern Combined Wells		MWD Diemer Filtration Plant		MWD Jensen Filtration Plant		MWD Weymouth Filtration Plant		State and Federal Primary Standard (MCL or MRDL)	MEET PRIMARY STANDARD ?	State PHG or (Federal MRDLG or MCLG)	Major Sources of Contaminants In Our Drinking Water
		Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average				
Alpha Emitters (a)	pCi/L	<3.0 - 5.5	3.6	3.2 - 6.0	4.3	<3.0 - 6.0	4.3	<3.0 - 7.2	3.6	<3.0 - 4.2	<3.0	<3.0	<3.0	15	YES	(0)	Erosion of natural deposits
Aluminum	µg/L	<50	<50	<50	<50	<50	<50	<50 - 58	<50	<50 - 110	81	<50 - 190	<50	1000	YES	600	Residue from surface water treatment process; erosion of natural deposits
Arsenic	µg/L	<2.0 - 7.0	2.3	<2.0 - 5.0	2.0	<2.0 - 5.0	2.0	<2.0	<2.0	<2.0	<2.0	<2.0 - 2.4	<2.0	10	YES	0.004	Erosion of natural deposits; natural hot springs
Barium	µg/L	<100	<100	<100	<100	<100 - 110	<100	<100	<100	<100	<100	<100	<100	1000	YES	2000	Erosion of natural deposits; discharge from oil drilling waste and metal refineries
Beta Emitters (a)	pCi/L	<4.0 - 8.4	4.6	<4.0 - 5.3	4.0	<4.0 - 6.4	4.0	<4.0 - 4.7	<4.0	<4.0	<4.0	<4.0	<4.0	50	YES	(0)	Decay of natural and man-made deposits
Bromate (f)	µg/L	<5.0 - 6.6	<5.0	NA	NA	NA	NA	NA	NA	<5.0 - 7.2	5.6	NA	NA	10	YES	(0)	By-product of drinking water disinfection
Nitrate (as NO3)	mg/L	<2.0	<2.0	<2.0 - 16	7.1	<2.0 - 14	7.1	<2.0 - 3.0	2.0	<2.0 - 2.4	2.1	<2.0 - 4.9	2.4	45	YES	45	Erosion of natural deposits; runoff and leaching from fertilizer use
Nitrate + Nitrite (as Nitrogen)	mg/L	<0.40	<0.40	<0.4 - 3.7	1.7	<0.40 - 3.2	1.7	<0.40 - 0.68	0.45	<0.40 - 0.54	0.47	<0.40 - 0.63	0.45	10	YES	10	Erosion of natural deposits; runoff and leaching from fertilizer use
Tetrachloroethylene [PCE]	µg/L	<0.5	<0.5	<0.5 - 1.8	<0.5	<0.5 - 1.3	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5	YES	0.06	Discharge from factories, dry cleaners, auto shops (metal degreaser)
Trichloroethene [TCE]	µg/L	<0.5	<0.5	<0.5 - 2.7	0.51	<0.5 - 2.5	0.51	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	5	YES	0.8	Discharge from metal degreasing sites and other factories
Turbidity (b)	NTU	0.38	99.98%	NA	NA	NA	NA	0.08	100%	0.05	100%	0.09	100%	TT	YES	none	Soil runoff
Uranium (a)	pCi/L	1.2 - 4.7	3.4	2.2 - 6.6	4.8	<1.0 - 6.1	5.4	<1.0	<1.0	1.1 - 1.2	1.2	<1.0	<1.0	20	YES	0.43	Erosion of natural deposits

HEALTH-BASED PRIMARY DRINKING WATER STANDARDS CONTAMINANTS DETECTED IN DISTRIBUTION SYSTEM AND REPORTED ON CITY-WIDE BASIS

Constituents / Contaminants	Units	Range	Average	State and Federal Primary Standard (MCL or MRDL)	MEET PRIMARY STANDARD ?	State PHG or (Federal MRDLG or MCLG)	Major Sources of Contaminants In Our Drinking Water
Copper (at-the-tap) (c)	µg/L	Number of Samples Exceeding AL = 1 out of 106	90th Percentile Value = 802	TT, AL=1300 (d)	YES	170	Internal corrosion of household water plumbing systems
Fluoride	mg/L	Range = 0.11 - 1.3	Average = 0.57	2	YES	1	Erosion of natural deposits; water additive that promotes strong teeth
Lead (at-the-tap) (c)	µg/L	Number of Samples Exceeding AL = 2 out of 106	90th Percentile Value = 10	TT, AL=15 (d)	YES	2	Internal corrosion of household water plumbing systems
Total Chlorine Residual	mg/L	Range = 0 - 6.0	Average = 1.7	4.0	YES	4.0	Drinking water disinfectant added for treatment
Total Coliform Bacteria	%	Range: 0 - 1.3% Coliform Positive Samples	Average = 0.3 % Coliform Positive Samples (b)	5% of monthly samples are coliform positive	YES	(0)	Naturally present in the environment
Total Haloacetic Acids	µg/L	Range = 10 - 134	City-wide Highest Running Annual Average = 45	60	YES	none	By-product of drinking water disinfection
Total Trihalomethanes [TTHM]	µg/L	Range = 25 - 111	City-wide Highest Running Annual Average = 60	80	YES	none	By-product of drinking water chlorination

TABLE II - AESTHETIC-BASED SECONDARY DRINKING WATER STANDARDS CONSTITUENTS/CONTAMINANTS DETECTED IN TREATED WATER

Constituents/Contaminants	Units	Los Angeles Filtration Plant		Northern Combined Wells		Southern Combined Wells		MWD Diemer Filtration Plant		MWD Jensen Filtration Plant		MWD Weymouth Filtration Plant		State and Federal Standard MCL	MEET SECONDARY STANDARD?	Major Sources of Contaminants In Our Drinking Water
		Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average			
Aluminum	µg/L	<50	<50	<50	<50	<50	<50	<50 - 58	<50	<50 - 110	81	<50 - 190	<50	200	YES	Residue from some surface water treatment process; erosion of natural deposits;
Chloride	mg/L	20 - 31	25	21 - 39	32	23 - 53	32	47 - 97	66	44 - 56	50	42 - 98	61	500	YES	Runoff/leaching from natural deposits; seawater influence
Color	Units	4 - 5	4	3 - 5	4	3 - 7	4	1 - 2	2	1 - 2	1	1 - 4	2	15	YES	Naturally-occurring organic matter
Corrosivity (e)	LSI	(-0.46) - (-0.17)	-0.29	(-0.35) - (-0.77)	0.12	(-0.35) - (-0.94)	0.12	0.07 - 0.29	0.2	0.02 - 0.26	0.14	0.04 - 0.30	0.19	non-corrosive	NO/YES/YES/YES/YES/YES	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors.
Foaming Agents (MBAS)	µg/L	<0.05	<0.05	<0.05	<0.05	<0.05 - 0.1	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	500	YES	Municipal and industrial discharges
Manganese NL = 500	µg/L	<20	<20	<20	<20	<20 - 46	<20	<20	<20	<20	<20	<20	<20	50	YES	Leaching from natural deposits
Odor	TON	<1 - 1	<1	<1	<1	<1	<1	2	2	2	2	2	2	3	YES	Naturally occurring organic materials
Specific Conductance	µS/cm	265 - 368	338	308 - 699	616	374 - 749	616	536 - 810	652	411 - 539	480	482 - 829	595	1600	YES	Substances that form ions when in water; seawater influence
Sulfate	mg/L	20 - 39	30	25 - 151	118	33 - 151	118	106 - 159	132	55 - 86	69	78 - 162	116	500	YES	Runoff/leaching from natural deposits
Total Dissolved Solids [TDS]	mg/L	138 - 225	195	184 - 468	451	251 - 490	451	307 - 458	378	236 - 304	273	270 - 481	344	1000	YES	Runoff/leaching from natural deposits
Turbidity	NTU	0.10 - 0.2	0.12	0.10 - 0.25	0.14	0.10 - 0.80	0.14	0.04 - 0.06	0.05	0.04	0.04	0.05 - 0.07	0.06	5	YES	Soil runoff
Zinc	µg/L	<50	<50	<50	<50	<50 - 2830	<50	<50	<50	<50	<50	<50	<50	5000	YES	Corrosion control additive; runoff/leaching from natural deposits

Abbreviations
 < = less than (example: In Table 1, Aluminum has an average value of <50 for Los Angeles Aqueduct Filtration Plant. This means that the average value is less than 50 micrograms per liter, which is the lowest detection level (DLR) for reporting Aluminum.)
 % = Total coliform is reported for compliance as percentage of positive samples, but the unit for analytical reporting of total coliform bacteria is Colony Forming Units per 100 milliliters (CFU/100 ml) of sample.
 LSI units = Langelier Saturation Index (an indicator of corrosivity)
 mg/L = milligrams per liter (equivalent to ppm)
 NA = Not applicable
 NT = Not tested
 NTU = Nephelometric Turbidity Units; Turbidity is a measure of the cloudiness of the water. High turbidity can hinder the effectiveness of disinfectants.
 pCi/L = picoCuries per liter
 TON = Threshold Odor Number
 µg/L = micrograms per liter (equivalent to ppb)
 µS/cm = micro Siemens per centimeter

Calendar Year 2006 Water Quality Monitoring Results

TABLE III - UNREGULATED DRINKING WATER CONSTITUENTS/CONTAMINANTS DETECTED IN TREATED WATER

Constituents/Contaminants	Units	Los Angeles Filtration Plant		Northern Combined Wells		Southern Combined Wells		MWD Diemer Filtration Plant		MWD Jensen Filtration Plant	
		Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Alkalinity	mg/L	71 - 117	100	81 - 191	145	120 - 205	145	71 - 84	77	76 - 87	82
Boron NL = 1000	µg/L	340 - 590	420	140 - 530	320	130 - 530	320	<100 - 160	130	150 - 210	190
Bromide	µg/L	<20	<20	<20	<20	<20 - 39	<20	NT	NT	NT	NT
Calcium	mg/L	19 - 29	26	26 - 72	60	28 - 80	60	31 - 43	37	24 - 29	27
Chromium 6	µg/L	<1.0	<1.0	<1.0 - 3.7	<1.0	<1.0 - 2.8	<1.0	<1.0	<1.0	<1.0	<1.0
Magnesium	mg/L	4.1 - 7.2	5.8	5.5 - 18	14	6.0 - 22	14	13 - 20	17	11 - 13	12
pH	units	7.5 - 7.8	7.7	7.4 - 7.9	7.6	7.4 - 7.9	7.6	8.1 - 8.3	8.2	8.1 - 8.3	8.2
Phosphate (as Phosphorus)	µg/L	<10 - 10	<10	<10 - 54	30	12 - 961	30	NT	NT	NT	NT
Potassium	mg/L	2.7 - 4.5	3.7	2.7 - 4.6	3.8	2.8 - 4.4	3.8	2.8 - 3.9	3.2	2.3 - 2.8	2.6
Radon (a)	pCi/L	NA	NA	<100	<100	<100 - 530	<100	<100	<100	<100	<100
Silica	mg/L	14 - 20	18	16 - 25	21	19 - 25	21	NT	NT	NT	NT
Sodium	mg/L	24 - 41	34	24 - 48	44	40 - 48	44	52 - 85	65	39 - 56	47
Total Hardness (as CaCO ₃)	mg/L	68 - 101	88	91 - 259	215	91 - 276	215	134 - 185	161	110 - 128	120
Total Organic Carbon [TOC]	mg/L	1.4 - 1.8	1.6	0.59 - 2.1	1.0	<0.3 - 1.3	1.0	1.9 - 2.7	2.3	2.2 - 2.8	2.4
Vanadium NL = 50	µg/L	<3.0	<3.0	<3.0 - 8.0	<3.0	<3.0	<3.0	<3.0 - 3.5	<3.0	<3.0	<3.0

UNREGULATED CONTAMINANTS REPORTED ON AREA-WIDE BASIS

Contaminants	Units	Central Los Angeles		Harbor/Eastern Los Angeles		San Fernando Valley	
		Range	Average	Range	Average	Range	Average
Bromodichloromethane [BDCM]	µg/L	4.6 - 28	16	7.1 - 24	14	5.0 - 24	15
Bromoform	µg/L	<0.5 - 18	4.4	0.5 - 7.4	3.7	<0.5 - 5.9	1.6
Chlorate NL = 800	µg/L	117 - 252	191	104 - 726	250	22 - 313	168
Chloroform	µg/L	2.6 - 74	30	4.0 - 33	16	6.0 - 71	29
Dibromochloromethane [DBCM]	µg/L	2.7 - 24	12	7.1 - 17	11	4.0 - 23	9.6

Terms Used in the Tables

Detection Limit for Reporting Purposes (DLR): The DLR is the lowest level at which all CDHS certified laboratories can accurately and reliably detect a compound. The DLR provides a standardized basis for reporting purposes. For example, if two separate laboratories report that lead is "not detected," it is understood that the amount of lead in both waters was less than the DLR for lead.

Primary Drinking Water Standard or PDWS: MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goals (PHGs) (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect odor, taste, and appearance of drinking water. For certain contaminants, compliance with the MCL is based on the average of all samples taken throughout the year.

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 EPA. For known or suspected carcinogens, EPA automatically sets the level at zero.

Maximum residual disinfectant level (MRDL): The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum residual disinfectant level goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the EPA.

Milligram per liter (mg/L), microgram per liter (µg/L): These are units of measure used to indicate the amount of a contaminant in a certain volume of water. One milligram per liter is equivalent to one part per million (ppm). Likewise, one microgram per liter is equivalent to one part per billion (ppb).

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 Office of Environmental Health Hazard Assessment.

Treatment Technique (TT): A required treatment process intended to reduce the level of a contaminant in drinking water. For example, the filtration process is a treatment technique used to reduce turbidity (the cloudiness in water) and microbial contaminants from surface water. High turbidities may be indicative of poor or inadequate filtration.

Notification Levels (NL) - State: Health-based advisory levels established by CDHS for chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

Regulatory Action Level (AL) - Federal: The concentration of a contaminant established by EPA that, if exceeded, triggers treatment or other requirements that a water system must follow.

MWD Weymouth Filtration Plant		Major Sources of Contaminants In Our Drinking Water
Range	Average	
63 - 85	71	Erosion of natural deposits
100 - 150	130	Erosion of natural deposits; residue from surface water treatment process
NT	NT	Runoff/leaching from natural deposits; seawater influence
24 - 42	32	Erosion of natural deposits; natural hot springs
<1.0	<1.0	Industrial discharge; erosion of natural deposits
11 - 20	15	Erosion of natural deposits
8.3- 8.4	8.3	Naturally occurring dissolved gases and minerals
NT	NT	Erosion of natural deposits, agricultural run-off
2.5 - 4.0	2.9	Erosion of natural deposits
<100	<100	Decay of natural deposits
NT	NT	Erosion of natural deposits
48 - 91	62	Erosion of natural deposits
114 - 189	140	Erosion of natural deposits
1.8 - 2.7	2.2	Erosion of natural deposits
<3.0 - 3.4	<3.0	Erosion of natural deposits

Western Los Angeles		Major Sources of Contaminants In Our Drinking Water
Range	Average	
3.9 - 28	15	Disinfection by-product of chlorination
<0.5 - 9.1	1.4	Disinfection by-product of chlorination
340 - 851	609	Disinfection by-product of chlorination
1.1 - 87	40	Disinfection by-product of chlorination
1.2 - 16	7.7	Disinfection by-product of chlorination

Footnotes

- (a) Radiological data for LADWP samples are based on 2006 monitoring except for radon which was tested in 2005. Radiological monitoring is done every four years.
- (b) The new reporting requirement for treatment plant turbidity is: report the highest single measurement and the lowest monthly percentage of measurement that is less than or equal to 0.3 NTU. The turbidity level of the water from water filtration treatment plant must be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time.
Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality and filtration performance.
- (c) At-the-tap monitoring was conducted in 2006 according to the Federal Lead and Copper Rule guidelines. Although the City's source and treated waters have little if any detectable lead, studies were conducted and corrosion control is scheduled for implementation, as required by the Lead and Copper Rule.
- (d) A system is out of compliance if the Action Level is exceeded in the 90th percentile of all samples at the customer's tap.
- (e) Corrosivity values were taken from calculated Langelier Index: negative value means that the water may be corrosive, positive value means that the water is non-corrosive.
- (f) Bromate is a by-product of ozonation and is tested only in water treated with ozone. Diemer and Weymouth filtration plants will eventually use ozone to treat the water.

LADWP Spotlight



Water quality inspectors respond to customer concerns and questions—and investigate in person if necessary. Pictured, from left: Calvin Loretto, Charles Lembke, Koon Lui, Michael Renwick, Nathan Aguayo (supervisor), and Luis Macias.

Customer Service Water Quality Inspectors Make House Calls

Is your water looking slightly orange or emitting a strange odor? If you have questions or concerns about the quality of your water, the LADWP Water Quality Customer Services Group is here to help.

A team of six certified water quality inspectors is dedicated to monitoring water quality at the customer level—from the tap of your home or business. They field an average of 15 to 20 calls per day, responding to customers' concerns and questions, and make about 50 "house calls" every month.

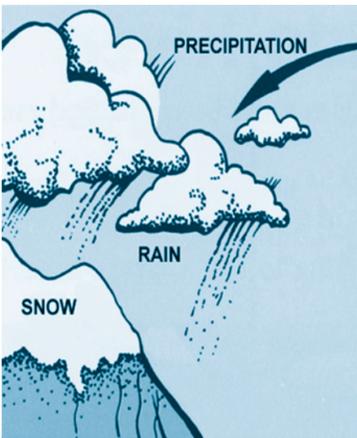
Typical inquiries involve the hardness of the water, or the levels of fluoridation, sodium, and other elements present. Complaints are mostly related to taste, odor, or discoloration. If the issue cannot be resolved over the phone, an inspector will visit your home or business to investigate the problem in person.

During a typical visit, the inspector will perform a "safety of supply" check to make sure the customer's water is safe to drink. This can involve testing and sampling the water from the customer's tap as well as from the nearest distribution line to help determine whether the problem originates in the City's or customer's plumbing.

Among the most common problems, for instance, discoloration of tap water is usually related to water standing for an extended period in corroded pipes within the customer's property. Flushing the water, or letting it run for a few minutes, usually clears up the problem. Although corrosion is not a safety issue, inspectors will still sample and test the water as an added safety measure. Occasionally the problem stems from the water supplied to the customer. For instance, algal growth in aqueducts and reservoirs that typically develop during the summer may create a musty odor. Such problems do not affect the safety of the water and are managed and resolved by LADWP within a few days.

After laboratory tests are completed, the inspector will contact the customer with the results and offer any suggestions for improving the situation. If a problem exists within the distribution system, the inspector will initiate corrective measures.

Customers can speak to a water quality inspector by calling our Water Quality Hotline at (213) 367-3182. The hotline is staffed from 7:30 a.m. to 4 p.m. Monday through Friday, except for holidays. If you call after hours, please leave a message including your name, address, telephone number, and a brief description of the problem or request and we will return your call on the next business day.



Precipitation

Water vapor from condensation in the atmosphere turns to rain or snow and falls to the ground. Precipitation can have some atmospheric pollutants in it.

Water Cycle



Infiltration and Runoff

Snow melt and rain soaking into the ground is called infiltration or percolation. Water can also flow into rivers and streams to lakes, reservoirs, and oceans. Runoff can pick up dissolved minerals and pollutants from the soil. Although infiltration can be a filtering process, it also allows the water to dissolve minerals or pollutants that may be present.



Water Quality News

Did you know?

The LADWP water system includes more than 7,100 miles of mains and trunk lines. In the past eight years, LADWP has removed about 10 miles of pre-1940 trunk lines. In the next 10 years, LADWP plans to upgrade or replace about 60 miles of trunk lines.

Research on Disinfection By-Products

One of the most significant distinctions of drinking water in the United States compared to other parts of the world is that we practice continuous disinfection of our treated water supplies. This provides some of the safest water anywhere in the world, and helps prevent many water-related diseases that plague other nations.

However, some studies suggest possible long-term and short-term adverse health effects associated with disinfection by-products (DBPs), especially one group of by-products known as total trihalomethanes (TTHMs).

A few recent studies suggest possible short-term effects, including low birth weight and miscarriages. Yet other studies show no such linkages or the results were inconclusive. Long-term studies also have associated TTHMs to adverse health effects such as cancer. Scientists continue to study TTHMs to provide a clearer understanding of the risks involved.

LADWP encourages women who are pregnant or think they may become pregnant to consult their physicians regarding drinking water and pregnancy. LADWP will continue to keep customers informed about the results of any future studies. LADWP also will continue to diligently track and implement new regulations as they go into effect. Please visit us online at www.ladwp.com/water/quality.

LADWP currently meets all the disinfection by-product standards (see Tables I and III on pages 6-9). In addition, LADWP is in the process of switching from chlorine to chloramines to maintain water disinfectant residual, which will further reduce levels of TTHMs.

Update on Surface Water Treatment Rule

The Surface Water Treatment Rule (SWTR), administered by CDHS, is a drinking water regulation designed to help safeguard reservoir supplies from microbiological contamination that may occur when rain runoff from nearby hillsides and slopes enters the water. In Los Angeles, SWTR applies to four open water reservoirs – Lower Stone Canyon, Encino, and Upper and Lower Hollywood.

LADWP has successfully met the compliance deadlines for all four open reservoirs that were subject to SWTR requirements. Construction of support facilities will continue but water from these reservoirs will no longer be served unless it is filtered.

LADWP has complied with SWTR by removing these reservoirs from regular service. The following is a progress report for each of the reservoirs affected by SWTR.

Upper and Lower Hollywood Reservoirs – were replaced by two 30-million-gallon tanks on July 2001.

Encino Reservoir – was removed from service on December 27, 2002. The permanent air gap was completed in August

2004. Operation of a new microfiltration plant to treat the reservoir water along with related facilities began in January 2006. This plant currently produces high quality drinking water at a maximum capacity of up to ten million gallons per day.

Lower Stone Canyon Reservoir – was removed from service on December 28, 2004. The permanent air gap and associated work for the reservoir was completed on September 12, 2005. A new microfiltration plant to treat the reservoir water and other related water facilities are expected to be completed by September 2007.

Update on Enhanced SWTR and Message for Cryptosporidium

Protection of surface water sources as outlined in the SWTR regulation is very important to the quality of treated drinking water. The Long-Term 2 Enhanced Surface Water Treatment Rule (LT2) is the latest drinking water regulation related to the treatment of surface water. LT2 provides for further protection from microbial pathogens like *Cryptosporidium* and *Giardia*. Required microbial monitoring under LT2 started in July 2006. In preparation for compliance to this rule, LADWP has been monitoring its source and treated waters for *Cryptosporidium* and *Giardia* since 2005. Although both were not detected in the finished treated water, *Cryptosporidium* was detected in some raw water reservoirs and the L.A. Aqueduct at very low concentrations of 1 to 2 oocyst per 10 liter sample. Below is CDHS's statement regarding *Cryptosporidium*:

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immunocompromised people are at greater risk of developing life-threatening illness. We encourage immunocompromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Message for Radon

Radon is mostly found in areas outside of California. In 2005, very low levels of radon were detected in some of our water supplies that serve the Central Los Angeles area (see Table III on pages 8-9). There is no established drinking water standard or monitoring requirement for radon. Radon, entering a home through tap water, is a small source of radon in indoor air. Although the radon levels were well below what EPA is currently considering as a standard, the EPA has asked us to

share the following information with you to help you better understand radon.

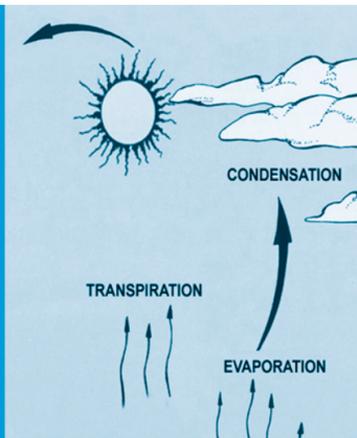
Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program or call EPA's Radon Hotline (800-SOS-RADON).

Drinking Water Source Assessment and Protection Program

In July 2002, LADWP completed an assessment of drinking water sources in the Owens Valley and Mono Basin watersheds that supplement the Los Angeles Aqueduct supply. These sources are most vulnerable to geothermal activities that release naturally occurring arsenic in creeks that feed into the Owens River. Other activities that may impact water quality in these watersheds are livestock grazing, wildlife, and unauthorized public use of reservoirs. The extent and significance of water quality impact from these activities are not yet fully determined. Regular monitoring for *Cryptosporidium* and *Giardia* indicates that their presence is infrequent and at very low levels.

Assessment for groundwater sources in San Fernando and Sylmar was completed in December 2002. Assessment for groundwater sources in the Central Basin was completed and submitted in March 2003. Since these wells are located in urban areas, they are most vulnerable to the following activities that are associated with contaminants found in the well water; dry cleaning, chemical processing/storage, fertilizer/pesticide storage, metal finishing, and septic system. LADWP closely manages the use of this water by blending it with water from other sources to ensure that the drinking water standards are not exceeded. A copy of the assessment can be obtained by contacting LADWP Regulatory Affairs and Consumer Protection Group at (213) 367-3335.

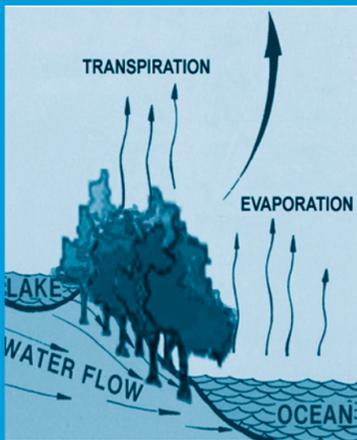
In December 2002, MWD completed its source water assessment of its Colorado River and State Water Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation and wastewater. A copy of the assessment can be obtained by contacting MWD at (213) 217-6850.



Condensation

Water vapor from evaporation and transpiration condense to form clouds and fog. Water droplets can be created around small particles and dust in the air.

Water Cycle



Evaporation

Water in lakes and oceans can evaporate, or turn to water vapor through heat from the sun. Water vapor can come from plants through transpiration. These processes are cleansing as contaminants and water pollutants are left behind.

This Report

About This Report

The 2006 Water Quality Report was prepared by the Los Angeles Department of Water and Power (LADWP). This report is required by the California Department of Health Services (CDHS) and was prepared in accordance with CDHS guidelines. It was produced and mailed to you at a cost of 25 cents. This report is printed on recycled paper.

Contact Information

ABOUT THE LOS ANGELES DEPARTMENT OF WATER AND POWER (LADWP)

LADWP, the largest municipal utility in the nation, was established more than 100 years ago to provide a reliable and safe water and electric supply to the City's 4 million residents and businesses.

LADWP is governed by a five-member Board of Water and Power Commissioners, appointed by the Mayor and confirmed by the City Council.

The Board meets regularly on the first and third Tuesdays of each month at 1:30 p.m. Meetings are held at:

Los Angeles Department of Water and Power
111 North Hope Street, Room 1555H
Los Angeles, CA 90012-2694

The meeting agenda is available to the public on the Thursday prior to the week of the meeting. You can access the Board agenda at www.ladwp.com or by calling (213) 367-1351.

For general information about LADWP, call 1-800-DIAL DWP (1-800-342-5397) or visit www.ladwp.com.

For questions regarding water quality, call the LADWP Water Quality Customer Services Group at (213) 367-3182.

For questions regarding this report, please call Cesar Vitangcol at (213) 367-1767.

Want to know more about your drinking water and related regulations?

Los Angeles Department of Water and Power www.ladwp.com
California Department of Health Services (CDHS) www.dhs.ca.gov/ps/ddwem
U.S. Environmental Protection Agency (EPA) www.epa.gov

A Message to Our Customers

The Los Angeles Department of Water and Power would like to thank and congratulate our customers for conserving water. The residents and businesses of Los Angeles used the same amount of water in 2006 as they did 25 years ago, despite a population increase of one million people. During this dry and potentially very warm summer, we urge you to continue to be vigilant in saving water. The water you save today may be the water you need tomorrow.

Messages for Non-English-Speaking Customers

This report contains important information about your drinking water. If you have any questions regarding this report, please contact us at (800) 342-5397.

Este informe contiene información importante sobre su agua potable. Si tiene alguna pregunta sobre este informe, por favor comuníquese con nosotros llamando al (800) 342-5397.

本報告包含有關您的飲用水的重要資訊，您對本報告如有任何疑問，請致電：(800) 342-5397。

Báo cáo này có tin tức quan trọng về nguồn nước uống của quý vị. Nếu quý vị có thắc mắc về báo cáo này, xin liên lạc với chúng tôi tại số (800) 342-5397.

この報告書には皆さんの飲料水に関する重要な情報が含まれています。この報告書に関して何かご質問があれば(800) 342-5397 までお問い合わせください。

이 보고서는 여러분의 수돗물에 관한 중요한 정보를 포함하고 있습니다. 이 보고서에 관해 질문이 있으시면, (800) 342-5397 로 연락 주십시오.

В этом отчете содержится важная информация о вашей питьевой воде. Если у вас есть вопросы по этому отчету, вы можете позвонить по телефону (800) 342-5397.

Այս զեկոյցը պարունակում է կարեւոր տեղեկութիւններ ձեր խմելու ջրերի մասին: Այս խնդրի մասին որեւէ հարցում ունենալու պարագային կարող էք հեռաձայնել մեզ՝ (800) 342-5397 հեռախոսահամարով:

รายงานนี้ประกอบด้วยข้อมูลสำคัญเกี่ยวกับน้ำดื่มของท่าน ถ้าหากท่านมีคำถามใดๆเกี่ยวกับรายงานนี้ กรุณาติดต่อเราได้ที (800) 342-5397

این گزارش حاوی اطلاعات مهمی در مورد آب آشامیدنی شماست. چنانچه سوالی در مورد این گزارش دارید لطفاً با شماره تلفن (800) 342-5397 با ما تماس بگیرید.

يحتوي هذا التقرير على معلومات هامة عن مياه الشرب في لوس انجلوس. إذا كان لديك أسئلة عن هذا التقرير نرجو الاتصال بنا على الرقم (800) 342-5397.



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