

## PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday, the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments on our Annual Water Quality Report. For questions or comments regarding water quality or this report, please contact Mr. Timothy Chen at (626) 300-3342. To view this report on the internet, please visit our website at [www.lacwaterworks.org](http://www.lacwaterworks.org).



Make every drop count in this drought. Visit [www.lacwaterworks.org](http://www.lacwaterworks.org) for rebate information and more water saving tips.



900 S. Fremont Ave.  
Alhambra, CA 91803

To the Water Customer at:

# LACWD

## LOS ANGELES COUNTY WATERWORKS DISTRICTS

# 2011 ANNUAL WATER QUALITY REPORT

WATERWORKS DISTRICT NO. 21, KAGEL CANYON

## LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 21, KAGEL CANYON WATER QUALITY REPORT FOR CALENDAR YEAR 2011

The Los Angeles County Waterworks District is pleased to provide you with our 2011 Annual Water Quality Report. We are committed to serving you a reliable supply of high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

There are two drinking water quality standards, Primary and Secondary Drinking Water Standards. Primary Drinking Water Standards are set for substances that are thought to pose a health risk at certain levels and are enforceable by law. Secondary Drinking Water Standards are set for substances that do not pose a health risk and are intended to control the aesthetic qualities related to the public acceptance of drinking water. Secondary Standards are not enforceable by law. We are pleased to inform you that during all of 2011, your drinking water met all Primary and Secondary Drinking Water Standards.

This report is intended to provide you with a better understanding of your drinking water. It contains information about where your water comes from, how your water is treated and monitored, and what contaminants may be present in your water. Moreover, we have included source water assessments, results from our water quality testing, and general information about your drinking water.

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

## WATER QUALITY MONITORING

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these regulations, the District has contracted with a State-certified laboratory to conduct all water quality analyses.

The source water is tested for chemical, physical, radiological, and bacteriological parameters as required by Federal and State regulations. We also test for additional organic and inorganic chemicals that are not regulated.

Key locations within the distribution system have been selected to monitor water quality. Every week, the distribution system is tested for bacteria and disinfectant levels to ensure that you receive safe and high quality drinking water. The distribution system is also tested for color, odor, temperature, turbidity, and disinfection by-products monthly. All tests are conducted in a State-certified laboratory using Federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.



## THE SOURCE OF YOUR WATER AND ITS TREATMENT

The District purchases its water from the Los Angeles Department of Water and Power (LADWP). LADWP water comes from the Eastern Sierras in the Owens valley via the Los Angeles Aqueduct, local groundwater, and the Metropolitan Water District (MWD) from the Sacramento-San Joaquin River Delta via the State Water Project. The water from LADWP is treated at their filtration plant using conventional treatment methods, which include coagulation, flocculation, sedimentation, and filtration. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their re-growth in the distribution pipes.



LADWP is gradually switching from chlorine to chloramines to disinfect their water. This will take several years and our customers should expect to receive either type of disinfectant in their water at any time. Both chlorine and chloramines are effective killers of bacteria and other microorganisms, but chloramines form less by-products and do not have a chlorinous odors. For further information, please visit [www.ladwp.com](http://www.ladwp.com) or call 1-800-DIAL DWP.

## SOURCE WATER ASSESSMENT

LADWP completed its Source Water Assessment (SWA) of the Los Angeles Aqueduct in July 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. The Los Angeles Aqueduct is most vulnerable to contamination from geothermal activities, agriculture, 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.



LADWP completed its SWA of its San Fernando and Sylmar groundwater sources in December 2002. Since the wells are located in urban areas, they are most vulnerable to contamination from the following activities; dry cleaning, chemical processing and storage, fertilizer and pesticide storage, metal finishing, and septic systems. 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. For a summary of the assessment, please contact LADWP Regulatory Affairs and Consumer Protection Group at (213) 367-3335.

MWD completed its SWA in December 2002. Water supplies from Northern California are most vulnerable to contamination from urban storm water runoff, wildlife, agriculture, recreation, and wastewater. For a summary of the assessment, please contact MWD at (213) 217-6850.

## EDUCATIONAL INFORMATION

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water 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 storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic 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.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.



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

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline.

**LEAD AND COPPER:** Every three years, the District is required to sample for lead and copper at specific consumer taps. The results for lead and copper are reported as the 90th percentile, which is the result that is greater than 90% of all the results. A system is out of compliance if the 90th percentile value exceeds the Regulatory Action Level (AL). If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The District is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>



## WATER QUALITY DATA

The table below lists all drinking water contaminants that were detected during the 2011 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The District tests weekly for bacteria in the distribution system and none was detected during 2011. Trihalomethanes, haloacetic acids, and

chlorine are also tested regularly in the distribution system and are reported below. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants do not change frequently.

PARAMETERS	UNITS	MCL	PHG	RANGE OF DETECTION	AVERAGE LEVEL	TYPICAL SOURCE OF CONSTITUENT
<b>PRIMARY DRINKING WATER STANDARDS</b>						
Arsenic	µg/L	10	0.004	ND - 4.0	3.6 (a)	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	mg/L	1	2	ND - 0.014	ND	Erosion of natural deposits
Fluoride	mg/L	2	1	0.6 - 0.8	0.7	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as NO <sub>3</sub> )	mg/L	45	45	ND - 0.7	ND	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Uranium	pCi/L	20	0.43	0.5 - 4.0	3	Erosion of natural deposits
Chlorine Residual	mg/L	MRDL=4.0	MRDLG=4	0.41 - 1.56	1.25 (a)	Drinking water disinfectant added for treatment
Haloacetic Acids (HAA5)	µg/L	60	n/a	9 - 35	28 (a)	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	µg/L	80	n/a	40 - 67	54 (a)	Byproduct of drinking water disinfection
<b>SECONDARY DRINKING WATER STANDARDS</b>						
Chloride	mg/L	500	n/a	18 - 33	26	Runoff / leaching from natural deposits; seawater influence
Color	unit	15	n/a	3 - 4	3.5	Naturally-occurring organic materials
Copper	mg/L	1	n/a	3 - 20	7	Internal corrosion of the household plumbing systems, erosion of natural deposits; leaching from wood preservatives
Iron	µg/L	300	n/a	ND - 21	ND	Leaching from natural deposits; industrial wastes
Odor Threshold	TON	3	n/a	ND	ND	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	n/a	214 - 427	310	Substances that form ions when in water; seawater influence
Sulfate	mg/L	500	n/a	13 - 29	12	Runoff / leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	mg/L	1000	n/a	101 - 202	168	Runoff / leaching from natural deposits
Turbidity	NTU	5	n/a	ND - 0.1	ND	Soil runoff



PARAMETERS	UNITS	MCL	PHG	RANGE OF DETECTION	AVERAGE LEVEL	TYPICAL SOURCE OF CONSTITUENT
<b>UNREGULATED CONTAMINANTS</b>						
Bicarbonate (as HCO <sub>3</sub> )	mg/L	n/a	n/a	50 - 106	87	Erosion of natural deposits
Boron	µg/L	n/a	n/a	158 - 529	378	Erosion of natural deposits
Calcium	mg/L	n/a	n/a	16 - 25	21	Erosion of natural deposits; natural hot springs
Chlorate	µg/L	n/a	n/a	61 - 992	368	Byproduct of drinking water disinfection
Magnesium	mg/L	n/a	n/a	3 - 7	6	Erosion of natural deposits
pH	unit	n/a	n/a	7.2 - 7.7	7.5	Naturally-occurring dissolved gases and minerals
Potassium	mg/L	n/a	n/a	2 - 4	4	Erosion of natural deposits
Silica	µg/L	n/a	n/a	12 - 19	17	Erosion of natural deposits
Sodium	mg/L	n/a	n/a	16 - 38	31	Erosion of natural deposits
Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	n/a	n/a	50 - 106	87	Erosion of natural deposits
Total Hardness	mg/L	n/a	n/a	52 - 90	76	Erosion of natural deposits
Total Organic Carbon (TOC)	mg/L	TT	n/a	0.9 - 1.5	1.3	Erosion of natural deposits
<b>LEAD AND COPPER RULE</b>						
Copper (Cu)	mg/L	AL=1.3	0.3	90% Value = 1.00		Internal corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives
Number of Samples Exceeding AL (Cu)				0 out of 10		
Lead (Pb)	µg/L	AL=15	0.2	90% Value = ND		Internal corrosion of household plumbing system; discharge from industrial manufacturers; erosion of natural deposits
Number of Samples Exceeding AL (Pb)				0 out of 10		

#### TERMS AND ABBREVIATIONS USED IN THE WATER QUALITY DATA TABLE

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

**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.

**Primary Drinking Water Standards (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Regulatory Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.

#### FOOTNOTES:

(a) Values reflect the Highest Running Annual Average (HRAA). HRAA is the highest of all Running Annual Averages (RAAs). RAA is a calculated average of all the samples collected within quarterly 12-month periods.

mg/L = Milligrams per liter (parts per million)  
µg/L = Micrograms per liter (parts per billion)

pCi/L = PicoCuries per liter  
ND = Non-detect

n/a = Not Applicable  
µS/cm = MicroSiemens per centimeter

NTU = Nephelometric turbidity unit  
NL = Notification level

TON = Threshold Odor Number



## BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. These devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. All units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitation Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as rings in the bathtub, scales on cooking pots and irons, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier. Distilled water may be used in place of drinking water in irons to prevent deposits.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.



## WATER CONSERVATION TIPS

In addition to protecting the quality of water delivered to you, we also promote and implement water conservation programs for the Districts' customers. For tips on how to conserve water and to learn more about the programs we offer, visit [www.lacwaterworks.org](http://www.lacwaterworks.org) or contact Rea Gonzalez at (626) 300-3338.

We can all take these simple steps to conserve water:

### Indoor:

- Fix indoor faucet and toilet leaks. Just a drip can waste more than 10,000 gallons per month.
- Turn off the water while you brush your teeth or shave.
- Take shorter showers and install a water efficient showerhead.
- Wash only full loads in the dishwasher and washing machine.

### Outdoor:

- Water according to current weather and season.
- Adjust your sprinkler heads so they water the yard, not the sidewalk or street.
- Landscape your yard and garden with California native and drought-tolerant plants. These plants are accustomed to local weather and soil conditions and thrive with little summer watering. Using them not only saves water, but saves maintenance time and produces a habitat for native birds, beneficial insects and wildlife. The best time to plant native plants is between October and May each year.

