

## 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.



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To the Water Customer at:

# LACWD

## LOS ANGELES COUNTY WATERWORKS DISTRICTS

# 2011 ANNUAL WATER QUALITY REPORT



WATERWORKS DISTRICT NO. 29, MALIBU,  
AND MARINA DEL REY



## LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 29, MALIBU, & MARINA DEL REY 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 West Basin Municipal Water District (WBMWD). WBMWD gets its water from the Metropolitan Water District (MWD). The source of water is the Sacramento-San Joaquin River Delta via the State Water Project and the Colorado River Aqueduct beginning at Lake Havasu. The District also has emergency connections with the Los Angeles Department of Water and Power and Las Virgenes Municipal Water District.

The water from WBMWD is treated at the MWD Joseph Jensen Filtration Plant using conventional treatment methods, which include coagulation, flocculation, sedimentation, filtration and ozonation. The water is then disinfected to kill any remaining microorganisms, such as bacteria, and reduce the potential for their regrowth in the distribution pipes.



### SOURCE WATER ASSESSMENT

MWD completed its Source Water Assessment (SWA) in December 2002. The SWA is used to evaluate the vulnerability of water sources to contamination and helps determine whether more protective measures are needed. Water supplies from Northern California are most vulnerable to contamination from urban storm water runoff, wildlife, agriculture, recreation and wastewater.

A copy of the entire assessment can be obtained by contacting MWD by phone 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 for 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.

PARAMETER	UNITS	MCL	PHG	RANGE OF DETECTION	AVERAGE LEVEL	TYPICAL SOURCE OF CONSTITUENT
<b>PRIMARY DRINKING WATER STANDARDS</b>						
Aluminum	mg/L	1	0.6	0.06 - 0.10	0.09 (a)	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic	µg/L	10	0.004	2.3	2.3	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Bromate	µg/L	10	0.1	ND - 8.8	5.9	Byproduct of drinking water disinfection
Fluoride	mg/L	2	1	0.7 - 0.9	0.8	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Beta Particle Activity	pCi/L	50	MCLG=0	ND - 4	ND	Decay of natural and manmade deposits
Nitrate (as NO <sub>3</sub> )	mg/L	10	10	0.4 - 0.5	0.4	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Uranium	pCi/L	20	0.43	ND - 2	1	Erosion of natural deposits
Chlorine Residual	mg/L	MRDL=4.0	MRDLG=4	0.85 - 1.15	0.97 (a)	Drinking water disinfectant added for treatment
Haloacetic Acids (HAA5)	µg/L	60	n/a	ND - 18	6 (a)	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHMs)	µg/L	80	n/a	15 - 44	26 (a)	Byproduct of drinking water disinfection
<b>SECONDARY DRINKING WATER STANDARDS</b>						
Aluminum	µg/L	200	600	61 - 99	86 (a)	Erosion of natural deposits; residue from some surface water treatment processes
Chloride	mg/L	500	n/a	59 - 69	64	Runoff/leaching from natural deposits; seawater influence
Color	unit	15	n/a	1	1	Naturally-occurring organic materials
Odor Threshold	TON	3	n/a	2	2	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	n/a	420 - 530	500	Substances that form ions when in water; seawater influence
Sulfate	mg/L	500	n/a	54 - 58	56	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS)	mg/L	1000	n/a	280 - 290	280	Runoff/leaching from natural deposits
Turbidity	NTU	5	n/a	0.03 - 0.09	0.03	Soil runoff

PARAMETER	UNITS	MCL	PHG	RANGE OF DETECTION	AVERAGE LEVEL	TYPICAL SOURCE OF CONSTITUENT
<b>UNREGULATED CONTAMINANTS</b>						
Boron	µg/L	NL=1000	n/a	190	190	Erosion of natural deposits
Calcium	mg/L	n/a	n/a	26 - 28	27	Erosion of natural deposits; natural hot springs
Chlorate	µg/L	NL=800	n/a	26	26	Byproduct of drinking water disinfection
Chromium, Hexavalent (CrVI)	µg/L	n/a	n/a	0.20	0.20	Industrial discharge; erosion of natural deposits
Magnesium	mg/L	n/a	n/a	12	12	Erosion of natural deposits
N-Nitrosodimethylamine (NDMA)	µg/L	NL=0.01	n/a	ND - 0.005	0.003	Byproduct of chloramination
pH	unit	n/a	n/a	8.1 - 8.4	8.2	Naturally-occurring dissolved gases and minerals
Potassium	mg/L	n/a	n/a	2.7	2.7	Erosion of natural deposits
Sodium	mg/L	n/a	n/a	52 - 57	54	Erosion of natural deposits
Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	n/a	n/a	76 - 93	85	Erosion of natural deposits
Total Hardness	mg/L	n/a	n/a	100 - 120	110	Erosion of natural deposits
Total Organic Carbon (TOC)	mg/L	TT	n/a	1.6 - 2.1	1.9 (a)	Erosion of natural deposits
Vanadium	µg/L	NL=50	n/a	3.4	3.4	Erosion of natural deposits
<b>LEAD AND COPPER RULE</b>						
Copper (Cu)	mg/L	AL=1.3	0.3	90% Value = 0.19		Internal corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives
Number of Samples Exceeding AL (Cu)				0 out of 32		
Lead (Pb)	µg/L	AL=15	0.2	90% Value = 5.4		Internal corrosion of household plumbing system; discharge from industrial manufacturers; erosion of natural deposits
Number of Samples Exceeding AL (Pb)				1 out of 32		

#### 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.

