

# 2011



## CITY OF LOMITA WATER SYSTEM

# ANNUAL WATER QUALITY REPORT

## DEAR CUSTOMER:

The City of Lomita 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 City has contracted with the Los Angeles County Waterworks Districts (LACWD) to oversee monitoring and reporting to comply with Federal and State water quality regulations. The LACWD contracts 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. Additional organic and inorganic chemicals are tested for but 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, and turbidity monthly, and disinfection byproducts quarterly. 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.

## PUBLIC PARTICIPATION AND CONTACT INFORMATION

Regular City Council meetings are held on the first and third Mondays of each month at 7:00 p.m. in Lomita City Hall, 24300 Narbonne Avenue.

The City of Lomita and the Los Angeles County Waterworks Districts welcome your comments and participation in the preparation of this Annual Water Quality Report. For questions or comments regarding water quality of this report, please contact the city's Public Works Department at (310) 325-9830.

To view this report on the internet, please visit the City's website or the Los Angeles County Department of Public Works Waterworks website at <http://dpw.lacounty.gov/wwd/web/YourWater/AnnualWaterQualityReports.aspx>

# THE SOURCE OF YOUR WATER AND ITS TREATMENT

The City of Lomita's sources of drinking water are local groundwater and surface ("imported") water purchased from 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 beginning at Lake Havasu.



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

## SOURCE WATER ASSESSMENT

In December 2002, the 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, recreational use, and wastewater.



A copy of the entire assessment can be obtained by contacting MWD by phone at (213) 217-6850.





# CONTAMINANTS THAT MAY BE PRESENT IN 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 and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or 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 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 use.

**Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff 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 tap water is safe to drink, the USEPA and CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

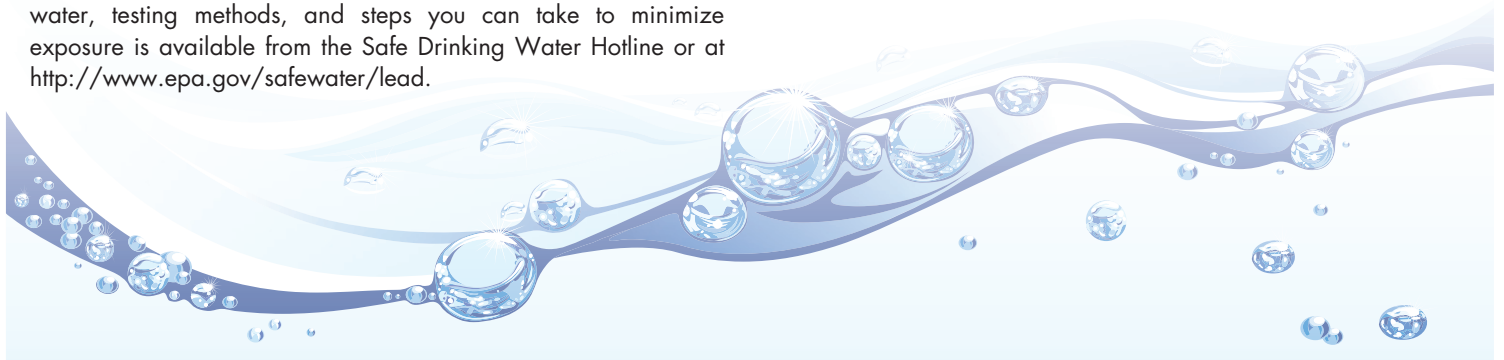
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling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

## THE QUALITY OF YOUR WATER

**Lead and Copper:** During 2011, we conducted lead and copper sampling from several high-risk homes in the city as required by CDPH. The 90th percentile result for copper was 0.085 milligrams per liter and below detectable levels for lead. These results are well below the regulatory Action Levels for lead and copper in drinking water. The next round of lead and copper monitoring is scheduled for 2014.

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 City of Lomita 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>.

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 risks of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).



# BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS

**B**ottled 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



Every California resident can take these simple steps to save water and reduce our impact on the planet.

- Install water saving devices like faucet aerators and low-flow showerheads.
- Cut shower time down to 5 to 8 minutes.
- Turn off water while washing face, shaving, or brushing teeth.
- Turn off sprinklers in the winter or when it's raining or windy.
- Fix a leaky faucet and save 2,000 gallons a year.



Up to 70% of residential water use occurs outdoors. Make sure your sprinklers water the yard, not the sidewalk or street and save 500 gallons a month. Landscaping your yard and garden with California native and drought-tolerant plants is also a smart alternative for residents who want to have a beautiful garden and save water and money. These plants are acclimated 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.

# 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



PARAMETER	PHG or [MCLG]	MCL	TREATED SURFACE WATER		TYPICAL SOURCE OF CONSTITUENT		
			RANGE OF DETECTION	AVG. LEVEL			
<b>PRIMARY DRINKING WATER STANDARDS</b>							
<b>INORGANIC CONTAMINANTS</b>							
ALUMINUM (ppm)	0.6	1	ND-0.22	0.11 *	Erosion of natural deposits; residue from some surface water treatment processes		
FLUORIDE (ppm)	1	2	0.7-1.0	0.8	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories		
NITRATE (as N) (ppm)	10	10	ND-0.4	ND	Runoff and leaching from fertilizer use; septic tank and sewage; natural deposits erosion		
<b>RADIOLOGICAL CONTAMINANTS</b>							
GROSS ALPHA PARTICLE ACTIVITY (pCi/L)	[0]	15	ND-3	ND	Erosion of natural deposits		
GROSS BETA PARTICLE ACTIVITY (pCi/L)	[0]	50	ND-6	4	Erosion of natural deposits		
URANIUM (pCi/L)	0.43	20	1-2	2	Runoff and leaching from fertilizer use; sewage; natural erosion		
<b>DISINFECTION BYPRODUCTS PRECURSORS</b>							
TOTAL ORGANIC CARBON (ppm)	N/A	TT	1.7-2.9	2.3*	Various natural and manmade sources		
<b>DISTRIBUTION SYSTEM WATER QUALITY</b>							
DISINFECTANTS & DISINFECTION BYPRODUCTS	MCLG OR [MRDLG]	MCL OR [MRDL]	RANGE OF DETECTION	HRAA	TYPICAL SOURCE OF CONSTITUENT		
TOTAL CHLORINE (ppm)	[4] as Cl <sub>2</sub>	[4] as Cl <sub>2</sub>	1.85-2.46	2.20	Drinking water disinfectant added for treatment		
TOTAL TRIHALOMETHANES (ppb)	N/A	80	21-66	42	Byproduct of drinking water disinfection		
HALOACETIC ACIDS (ppb)	N/A	60	1-45	19	Byproduct of drinking water chlorination		
<b>RESIDENTIAL TAP WATER QUALITY</b>							
LEAD AND COPPER (UNITS)	PHG	ACTION LEVEL	RANGE OF DETECTION	90TH % LEVEL	NUMBER OF SITES SAMPLED	NUMBER OF SITES ABOVE ACTION LEVEL	TYPICAL SOURCE OF CONSTITUENT
COPPER (ppm) 2011	0.3	1.3	ND-0.275	0.085	30	0	Internal corrosion of household plumbing system; erosion of natural deposits; leaching from wood preservatives
LEAD (ppb) 2011	0.2	15	ND-23.1	ND	30	0	Internal corrosion of household plumbing system; discharge from industrial manufactures; erosion of natural deposits

PARAMETER	PHG or [MCLG]	MCL	TREATED SURFACE WATER		TYPICAL SOURCE OF CONSTITUENT
			RANGE OF DETECTION	AVG. LEVEL	
<b>SECONDARY DRINKING WATER STANDARDS</b>					
<b>GENERAL PHYSICAL PARAMETERS</b>					
ALUMINUM (ppb)	600	200	ND-220	110	Erosion of natural deposits; residue from some surface water treatment processes
CHLORIDE (ppm)	N/A	500	63-76	70	Runoff/leaching from natural deposits; seawater influence
COLOR (Units)	N/A	5	1-2	2	Naturally-occurring organic materials
ODOR THRESHOLD (Units)	N/A	3	2	2	Naturally-occurring organic materials
TURBIDITY (units)	N/A	5	0.02-0.07	0.05	Soil runoff
<b>ADDITIONAL PARAMETERS</b>					
SPECIFIC CONDUCTANCE (µS/cm)	N/A	1600	320-870	630	Substances that form ions when in water; seawater influence
SULFATE (ppm)	N/A	500	120-170	150	Runoff/leaching from natural deposits; industrial wastes
TOTAL DISSOLVED SOLIDS (TDS) (ppm)	N/A	1000	390-480	440	Runoff / leaching from natural deposits
<b>UNREGULATED CONTAMINANTS</b>					
<b>GENERAL MINERAL CON/ATITUENTS</b>					
TOTAL ALKALINITY (ppm)	N/A	N/A	43-110	82	Leaching from natural deposits
CALCIUM (ppm)	N/A	N/A	41-54	48	Leaching from natural deposits
TOTAL HARDNESS (ppm)	N/A	N/A	60-250	170	Leaching from natural deposits
MAGNESIUM (ppm)	N/A	N/A	16-21	18	Leaching from natural deposits
pH (Units)	N/A	N/A	7.8-8.8	8.1	Natural acidity/alkalinity of water
POTASSIUM (ppm)	N/A	N/A	3.4-4.1	3.8	Leaching from natural deposits
SODIUM (ppm)	N/A	N/A	62-76	69	Leaching from natural deposits
<b>OTHER PARAMETERS</b>					
PARAMETER	PHG or [MCLG]	NL	TREATED SURFACE WATER		HEALTH EFFECTS
			RANGE OF DETECTION	AVG. LEVEL	
BORON (ppm)	N/A	1	0.13	0.13	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals
CHLORATE (ppb)	N/A	800	42	42	N/A
CHROMIUM VI (ppb)	N/A	N/A	0.09	0.09	N/A
N-NITROSODIMETHYLAMINE (NDMA) (ppt)	3	10	ND-3	ND	N/A

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

**Maximum Contaminant Level (MCL)** is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.

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

**Public Health Goal (PHG)** is 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.

**Maximum Residual Disinfectant Level (MRDL)** is 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)** is 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 USEPA.

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

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

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

ppm = parts per million (milligrams per liter)  
 ppb = parts per billion (micrograms per liter)  
 pCi/L = picoCuries per liter  
 ppt = parts per trillion

N/A = Not Applicable  
 ND = None Detected  
 NL = Notification Level  
 SI = Saturation Index (Langelier)

NTU = Nephelometric Turbidity Unit  
 µmhos/cm = micromhos per centimeter  
 \*HRAA = Highest Running Annual Average