ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2016

Presented By

City of Lakewood

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

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

PWS ID#: 1910239

We've Come a Long Way

The City of Lakewood is pleased to present our annual water quality report covering the period between January 1 and December 31, 2016. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Lakewood's staff works hard every day—at any hour—to deliver the highest-quality drinking water. By investing in customer outreach and education, new treatment technologies, system upgrades, and staff training, the City of Lakewood ensures that reliable, high-quality tap water will be delivered to you and your family.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov/healthywater/drinking/) websites provide a substantial amount of information on many issues relating to water resources, water conservation, and public health. Also, the State Water Board, Division of Drinking Water has a website (http://www.waterboards.ca.gov/drinking_water/programs/) that provides current information on drinking water issues in California.

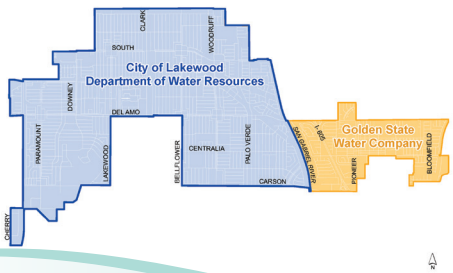
Where Does My Water Come From?

Your tap water comes from local, deep groundwater wells that supply our service area. The City of Lakewood is responsible for providing water services for residents and businesses west of the San Gabriel River. Golden State Water Company (GSWC)—a privately held water utility—serves the area east of the river. For information on Golden State's Water Quality Report, call (800) 999-4033.

Highlights of Lakewood's water system include:

- 100% groundwater, produced from 10 deep groundwater wells.
- Approximately 180 miles of water mains, ranging from 4 to 27 inches in diameter.
- 3 water storage facilities, holding approximately 13 million gallons.
- A 2,500-gallon-per-minute water treatment facility.
- 2 connections to Metropolitan Water District of Southern California, which import supplies through Central Basin Municipal Water District.
- 3 emergency interconnections: with Golden State Water Company, the City of Cerritos, and the City of Long Beach.
- Provision of more than 2 billion gallons of water annually to over 60,400 residential, commercial, and industrial customers via 20,000+ meter connections.
- Recycling of more than 6 percent of the water supply to use for irrigation at 41 sites.

Water Purveyors in Lakewood



Substances That Could Be in Water

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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information on bottled water is available on the California Department of Public Health Web site (http://www.cdph.ca.gov/programs/Pages/fdbBVW.aspx). 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.

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 can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;

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 stormwater runoff, agricultural applications, and septic systems;

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

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Community Participation

You are invited to participate in our City Council meetings to voice your concerns about your drinking water. Our council meets the 2nd and 4th Tuesdays of each month beginning at 7:30 p.m. at City Hall, 5050 Clark Avenue, Lakewood. Occasionally because of holidays or other conflicts, the council does not meet on its regular evening. Call city hall staff at 562-866-9771, extension 2140 to find out if the council is meeting on a particular evening.

Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) 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 www.epa.gov/lead.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please contact us at (562) 866-9771, extension 2700.

Protecting Your Water

Bacteria are a natural and important part of our world. There are around 40 trillion bacteria living in each of us; without them helping us with digestion and other key bodily functions, we would not be able to live healthy lives. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern, however, because it indicates that the water may be contaminated with other organisms that can cause disease.

In 2016, the U.S. EPA passed a new regulation called the Revised Total Coliform Rule, which requires additional steps that water systems must take in order to ensure the integrity of the drinking water distribution system by monitoring for the presence of bacteria like total coliform and *E. coli*. The rule requires more stringent standards than the previous regulation, and it requires water systems that may be vulnerable to contamination to have in place procedures that will minimize the incidence of contamination. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment of their system and correct any problems quickly. The U.S. EPA anticipates greater public health protection under the new regulation due to its more preventive approach to identifying and fixing problems that may affect public health.

The City of Lakewood is fortunate to have the highest quality drinking water, but our goal is to eliminate all potential pathways of contamination into our distribution system, and this new rule helps us to accomplish that goal.

Source Water Assessment

Assessments of the City of Lakewood's drinking water sources was completed in 2003 and 2006. These studies examined the potential vulnerability of each well to contaminants that could enter the water supply. Our groundwater supply is considered most vulnerable to the following activities: gas stations and repair shops, historic gas station locations, storage tanks, dry cleaners and National Pollutant Discharge Elimination System/Waste Discharge Requirement permitted discharges. A copy of the complete assessment is available by contacting the State Water Resources Control Board, Division of Drinking Water Office at 500 North Central Avenue, Glendale, CA 91203 or by calling the City of Lakewood Department of Water Resources at (562) 866-9771 ext 2700.

Conservation and Water-Use Efficiency

Lakewood water customers have done an amazing job answering the call to conserve water. As of the end of 2016, water customers were using 19% less water on average than in 2013. Visit us at www.lakewoodcity.org/water for the city's conservation program and water saving tips. For additional questions, please contact the City of Lakewood at (562) 866-9771, extension 2140.

Many resources and tools are available to assist you with conserving water including various water efficient appliances and devices. To view the latest updates on the drought and to learn how to conserve water, you can consult the following websites:

http://www.water.ca.gov/waterconditions

http://socalwatersmart.com/

http://www.h2ouse.org

http://centralbasin.org/en/conservation

Which household activity wastes the most water?

Most people would say the majority of water use comes from showering or washing dishes; however, toilet flushing is by far the largest single use of water in a home (accounting for 40% of total water use). Toilets use about 4 to 6 gallons per flush, so consider an ultra-lowflow (ULF) toilet, which requires only 1.5 gallons or less.

How much emergency water should I keep?

Typically, 1 gallon per person per day is recommended. For a family of four, that would be 12 gallons for 3 days. Humans can survive without food for 1 month, but can survive only 1 week without water.

How long can I store drinking water?

The disinfectant in drinking water will eventually dissipate, even in a closed container. If that container housed bacteria before it was filled with tap water, the bacteria may continue to grow once the disinfectant has dissipated. Some experts believe that water could be stored up to six months before needing to be replaced. Refrigeration will help slow the bacterial growth.

Test Results

The City of Lakewood's water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected. The State of California recommends monitoring for certain substances less often than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included.

REGULATED SUBSTANCES WITH PRIMARY STANDARDS

SUBSTANCE (UNIT OF MEASURE)	MCL [MRDL]	PHG (MCLG) [MRDLG]	AVERAGE AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	10	0.004	5	3 – 7	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chlorine [as C12] (ppm)	4.0	4	0.6	0.03 – 1.5	No	Drinking water disinfectant added for treatment
Fluoride (ppm)	2.0	1	0.3	0.2 – 0.3	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	15	0	2.4	ND – 6.9	No	Erosion of natural deposits
Haloacetic Acids (ppb)	60	NA	2.5	ND – 9.2	No	By-product of drinking water disinfection
Nitrate [as nitrogen] (ppm)	10	10	0.3	ND – 1.6	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	80	NA	15	5 – 45	No	By-product of drinking water disinfection
Uranium (pCi/L)	20	0.43	1.1	ND – 2.1	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from 31 sample sites throughout the community.

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2015	1.3	0.3	0.3	0/31	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2015	15	0.2	2.3	0/31	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

REGULATED SUBSTANCES WITH SECONDARY STANDARDS

SUBSTANCE (UNIT OF MEASURE)	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	500	NS	11	7 – 41	No	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	1,600	NS	353	300 – 620	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	500	NS	21	11 – 87	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	1,000	NS	214	180 – 410	No	Runoff/leaching from natural deposits

UNREGULATED AND OTHER SUBSTANCES [1]

SUBSTANCE (UNIT OF MEASURE)	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
1,4 Dioxane (ppb)	2.6	0 – 4.7	Used in many products including paint strippers, dyes, greases, varnishes, and waxes; also found as an impurity in antifreeze and aircraft deicing fluids and in some consumer products (deodorants, shampoos, and cosmetics)
Calcium (ppm)	41	30 – 89	Abundant naturally occurring element
Hardness in grains (grains/gal)	7.1	4.9 – 15.8	Naturally occurring calcium
Hardness (ppm)	122	84 – 270	Naturally occurring calcium
Magnesium (ppm)	7	ND – 40	Abundant naturally occurring element
pH, Laboratory (Units)	8.0	7.8 – 9.0	Hydrogen ion concentration
Potassium (ppm)	2.4	2.0 – 3.6	Runoff or leaching from natural deposits
Sodium (ppm)	31	25 – 38	Erosion of natural deposits

[1] Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

grains/gal (grains per gallon): Grains of compound per gallon of water.

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

MCLG (Maximum Contaminant Level Goal): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the Public Health Goal's (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NS: No standard

pCi/L (picocuries per liter): A measure of radioactivity.

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

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).