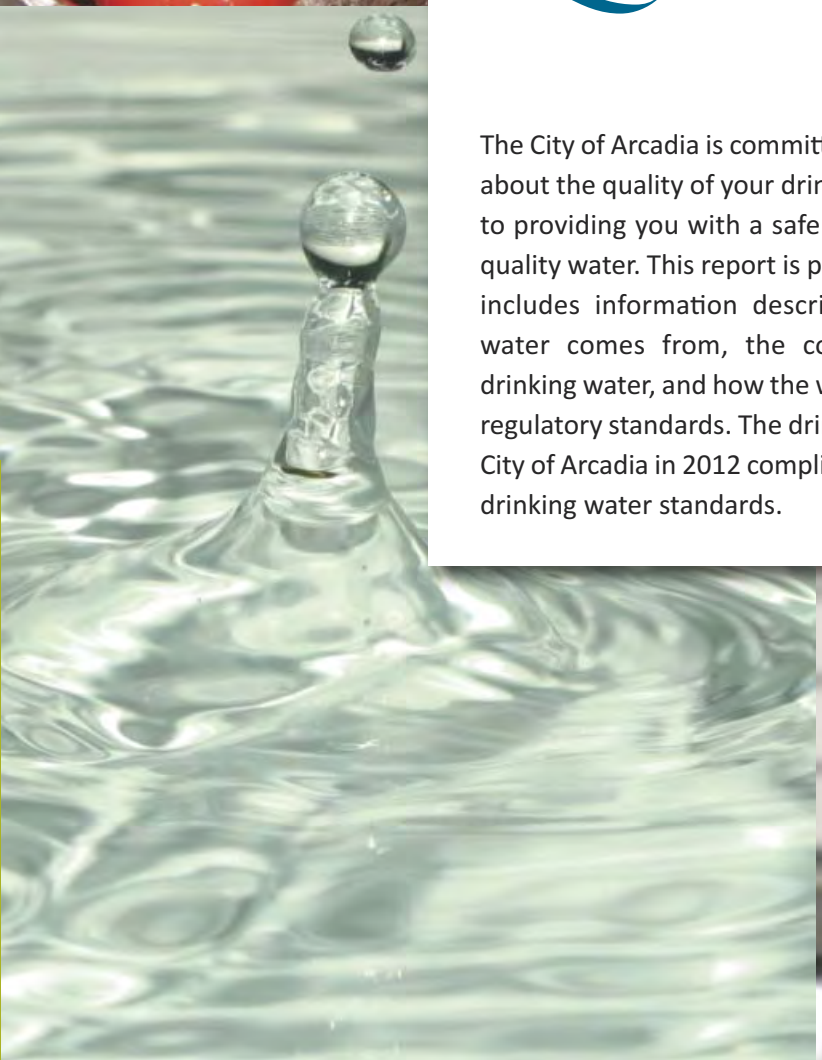
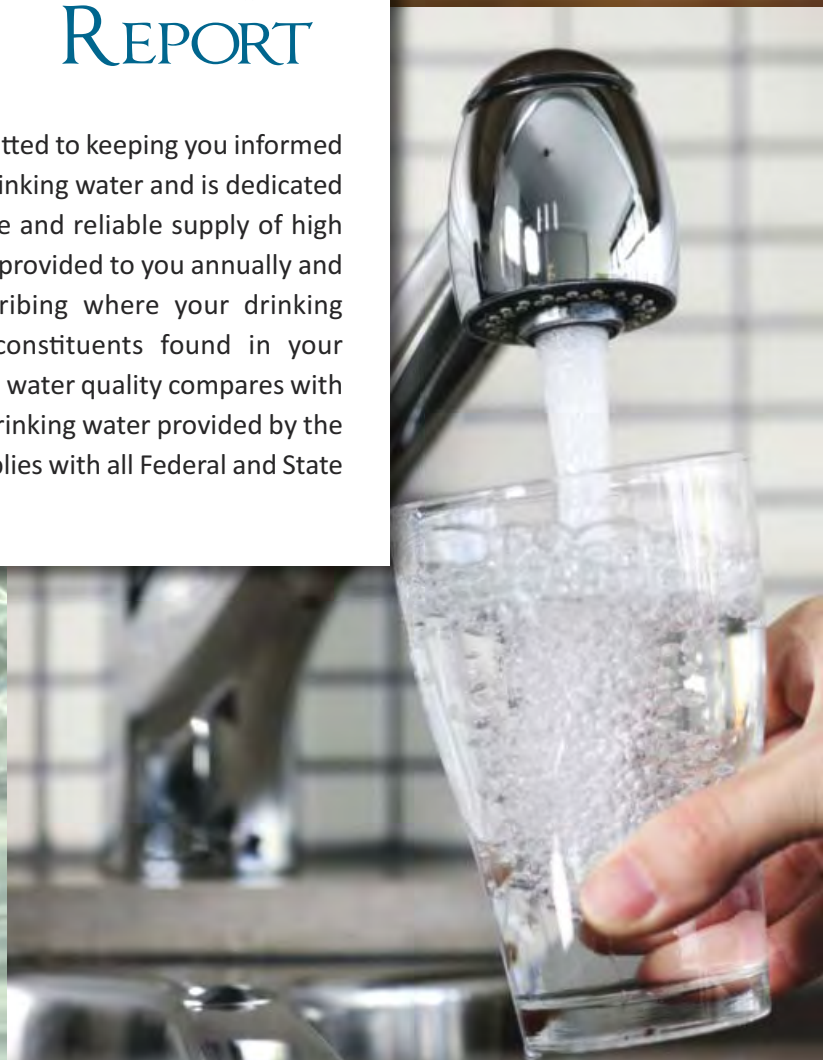



CITY OF
ARCADIA

2012 WATER QUALITY REPORT

The City of Arcadia is committed to keeping you informed about the quality of your drinking water and is dedicated to providing you with a safe and reliable supply of high quality water. This report is provided to you annually and includes information describing where your drinking water comes from, the constituents found in your drinking water, and how the water quality compares with regulatory standards. The drinking water provided by the City of Arcadia in 2012 complies with all Federal and State drinking water standards.

WHAT ARE WATER QUALITY STANDARDS?

In order to ensure that tap 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. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water standards established by USEPA and CDPH set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

• 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 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 pathogens.

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

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

• Notification Level (NL): An advisory level which, if exceeded, requires the drinking water system to notify the governing body of the local agency in which users of the drinking water reside (i.e. city council, board of directors, and county board of supervisors).

WHAT IS A WATER QUALITY GOAL?

In addition to mandatory water quality standards, USEPA and CDPH have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guideposts and direction for water management practices. The chart in this report includes three types of water quality goals:

• 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 USEPA.

• 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.

• 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.

Where does my drinking water come from?

The water supply for the City of Arcadia comes from two sources: (1) groundwater from wells in the Main San Gabriel Basin; and (2) groundwater from wells in the Raymond Basin.

Groundwater comes from natural underground aquifers that are replenished with local rainwater and imported water. The groundwater basins which the City of Arcadia pumps its water lay beneath the San Gabriel Valley. More than 30 retail water systems draw from the basins to provide water to residents and businesses.

Santa Anita Dam

WHAT CONTAMINANTS MAY BE PRESENT IN SOURCES OF DRINKING 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.

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 uses.

• 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 organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application and septic systems.

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 at (800) 426-4791.

Water Conservation

Water is essential to our everyday lives and our supplies are limited, so please use water wisely. Cutting water use inside and outside our homes is very important. If each of us changed our water-use habits, we could save billions of gallons of water. Here's how you can help:

- Wash only full loads of laundry and dishes
- Fix household leaks promptly
- Take shorter showers and install a water efficient showerhead
- Check your sprinkler system for leaks, overspray and broken sprinkler heads and repair promptly
- Use a broom instead of a hose to clean driveways and sidewalks

Landscape Audits

Water is essential to human life and it is the last thing we want to waste. Every day thousands of gallons of water are wasted through poorly functioning sprinklers and excess watering. The City of Arcadia offers free irrigation audits to Arcadia residents. The irrigation audits provide a careful evaluation of your irrigation system to identify water waste. To schedule a residential irrigation audit, call the City of Arcadia Public Works Services Department at (626) 256-6554.

Source Water Protection

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- Eliminate and/or reduce excess use of fertilizers and pesticides because they contain hazardous chemicals that can reach your drinking water source
- Pick up after your pets
- Dispose of chemicals properly; take used motor oil to a collection center

CITY OF ARCADIA 2012 WATER QUALITY TABLE

Constituent and (units)	MCL or [MRDL]	PHG (MCLG) or [MRDLG]	DLR	LOCAL GROUNDWATER Result (a)	LOCAL GROUNDWATER Range (Min-Max)	Typical Origins
***Primary Drinking Water Standards** - Health-Related Standards*						
Microbiological						
Total Coliforms **(b)**	5.0%	(0)	NA	1.2%	--	Naturally present in the environment
Disinfectant and Disinfection Byproducts (c)						
Total Trihalomethanes (TTHM) (µg/l)	80	NA	0.5	8.4	ND - 11	Byproduct of drinking water chlorination
Haloacetic acids (five) (HAA5) (µg/l)	60	NA	1	1.9	ND - 2.6	Byproduct of drinking water disinfection
Chlorine Residual (mg/l)	[4]	[4]	NA	0.75	0.1 - 1.5	Drinking water disinfectant
Organic Chemicals						
Tetrachloroethylene (PCE) (µg/l)	5	0.06	0.5	<0.5	ND - 2.1	Discharge from industrial activities
Trichloroethylene (TCE) (µg/l)	5	1.7	0.5	<0.5	ND - 2.3	Discharge from industrial activities
1,1-Dichloroethylene (1,1-DCE) (µg/l)	6	10	0.5	<0.5	ND - 0.71	Discharge from industrial activities
Inorganic Chemicals						
Arsenic (µg/l)	10	.004	2	<2	ND - 5.6	Erosion of natural deposits
Chromium, total (µg/l)	50	(100)	10	<10	ND - 13	Industrial discharge or erosion of natural deposits
Fluoride (mg/l) Naturally-occurring	2	1	0.1	0.71	0.34 - 1.3	Erosion of natural deposits
Nitrate as NO3 (mg/l)	45	45	2	10	ND - 28	Runoff and leaching from fertilizer use
Radioactivity (d)						
Gross Alpha Particle Activity (pCi/l)	15	(0)	3	<3	ND - 6.1	Erosion of natural deposits
Uranium (pCi/l)	20	0.43	1	2.2	ND - 4.4	Erosion of natural deposits
***Secondary Drinking Water Standards** - Aesthetic Standards, Not Health-Related*						
Chloride (mg/l)	500	NA	NA	19	8.5 - 32	Runoff/leaching from natural deposits
Iron (µg/l)	300	NA	100	<100	ND - 190	Runoff/leaching from natural deposits
Odor (threshold odor number) **(e)**	3	NA	1	1	1	Runoff/leaching from natural deposits
Sulfate (mg/l)	500	NA	0.5	38	13 - 64	Runoff/leaching from natural deposits
Specific Conductance (µmho/cm)	1,600	NA	NA	480	320 - 690	Substances that form ions in water
Total Dissolved Solids (mg/l)	1,000	NA	NA	300	180 - 430	Runoff/leaching from natural deposits
Turbidity (NTU) **(e)**	5	NA	NA	0.08	ND - 5	Runoff/leaching from natural deposits
Unregulated Constituents of Interest						
Boron (µg/l)	NL = 1,000	NA	100	180	ND - 380	Runoff/leaching from natural deposits
Chromium, Hexavalent (µg/l)	NA	0.02	1	3.6	3.6	Industrial discharge or erosion of natural deposits
Hardness as CaCO3 (mg/l)	NA	NA	NA	170	26 - 330	Runoff/leaching from natural deposits
Sodium (mg/l)	NA	NA	NA	33	13 - 66	Runoff/leaching from natural deposits
Vanadium (µg/l)	NL = 50	NA	3	10	3.4 - 25	Runoff/leaching from natural deposits

Lead and Copper Testing at Residential Taps

Lead/Copper	Action Level (AL)	PHG	90th Percentile Value	Typical Origins
Copper (mg/l) **(f)**	1.3	0.3	0.35	Corrosion of household plumbing system
Lead (µg/l) **(f)**	15	0.2	<5	Corrosion of household plumbing system

Notes

mg/l = parts per million or milligrams per liter
µg/l = parts per billion or micrograms per liter
pCi/l = picoCuries per liter
µmho/cm = micromhos per centimeter
NTU = Nephelometric Turbidity Units
AL = Action Level
DLR = Detection Limit for the Purpose of Reporting
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal
ND = Not Detected at DLR
NA = No Applicable Limit
NL = Notification Level
PHG = Public Health Goal
< = Detected but average is below the DLR

(a) The results reported in the table are average concentrations of the constituents detected in your drinking water during year 2012 or from the most recent tests done in compliance with regulations (2004-2012), except for TTHM, HAA5, lead and copper which are described below.

(b) The result is the highest percentage of positive samples collected in a month during 2012. Coliforms are bacteria used as an indicator that if present, indicates other potentially harmful bacteria may be present. In December 2012, Total Coliforms and Fecal/E. coli were detected in one sample collected in the distribution system. However, all follow-up confirmation samples were negative for Total Coliforms and Fecal/E. coli bacteria. No more than 5.0% of the monthly samples may be Total Coliform-positive. A routine sample and a repeat sample that are Total Coliform positive, and where one of these is also Fecal/E. coli positive constitutes an MCL violation. Therefore, the MCL was not violated in 2012.

(c) Four (4) locations in the distribution system are tested quarterly for disinfection byproducts. The highest locational running annual averages for TTHM and HAA5 are reported as "Result." The maximum and minimum of the individual results for TTHM and HAA5 are reported as "Range." Twenty (20) locations are tested weekly for chlorine residual.

(d) Not all sources were sampled for radioactivity in 2012; sources were sampled between 2004-2012. The most recent results are included.

(e) Twenty (20) locations in the distribution system are tested monthly for color, odor and turbidity. Color was not detected in 2012.

(f) Thirty (30) residences were sampled in August and September 2010. Concentrations were measured at the tap. Copper was detected at twenty-nine (29) locations; none exceeded the copper Action Level. Lead was detected at two (2) locations; one (1) sample exceeded the lead Action Level but lead was not detected in a confirmation sample collected later at the same location. The next round of lead and copper samples will be collected in 2013.

WHAT IS IN MY DRINKING WATER?

Your drinking water is regularly tested using CDPH-approved methods to ensure its safety. The table in this report lists all the constituents detected in your drinking water that have Federal and State drinking water standards. Detected unregulated constituents and other constituents of interest are also included.

ARSENIC

In 2012, the City of Arcadia recorded an arsenic measurement in the drinking water supply above 5 but below 10 micrograms per liter (µg/l). While your drinking water meets the 10 µg/l MCL for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The USEPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and in linked to other health effects such as skin damage and circulatory problems.

NITRATE

The maximum level of nitrate measured in the City of Arcadia's drinking water was 28 milligrams per liter (mg/l) in 2012. Although nitrate in your drinking water never exceeds the MCL of 45 mg/l, nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. Nitrate in drinking water at levels above 45 mg/l is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/l may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask for advice from your health care provider.

LEAD IN TAP WATER

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 Arcadia is dedicated to 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://water.epa.gov/drink/info/lead/index.cfm.

Are there any precautions the public should consider?

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 (1-800-426-4791).

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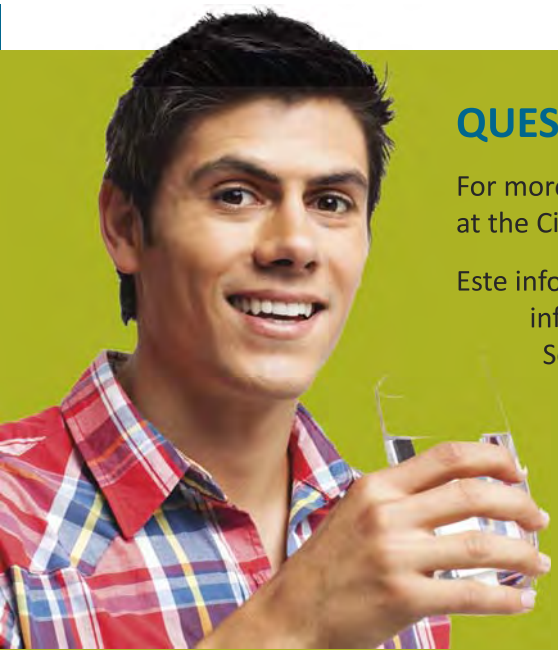
DRINKING WATER SOURCE ASSESSMENT

In accordance with the Federal Safe Drinking Water Act, an assessment of the drinking water sources for the City of Arcadia was completed in December 2002. The purpose of the drinking water source assessment is to promote source water protection by identifying types of activities in the proximity of the drinking water sources which could pose a threat to the water quality. The assessment concluded that the City of Arcadia's sources are considered vulnerable to the following activities or facilities associated with contaminants detected in the water supply: gas stations, automobile repair shops, chemical/petroleum pipelines, utility stations, electrical/electronic manufacturing, waste dumps/landfills, high density housing and dry cleaners. In addition, the sources are considered most vulnerable to the following activities or facilities not associated with contaminants detected in the water supply: sewer collection systems, car washes, transportation corridors, junk/scrap/salvage yards and above or below ground storage tanks. A copy of the complete drinking water source assessment is available at the City of Arcadia, Public Works Services Department located at 11800 Goldring Road, in Arcadia. You may request a summary of the assessment to be sent to you by contacting the City of Arcadia, Public Works Services Department at (626) 256-6554.

FLOURIDE IN DRINKING WATER

Our local groundwater is not supplemented with fluoride. Fluoride levels in drinking water are limited under California state regulations at a maximum dosage of 2 parts per million (ppm).

City Council meetings provide an opportunity for public participation in decisions that may affect the quality of your water. Regularly scheduled meetings of the City Council are held on the first and third Tuesday of each month at 7:00 p.m. in the City Council Chambers located at 240 West Huntington Drive in Arcadia.



QUESTIONS?

For more information or questions regarding this report, please contact Mr. Michael Thai at the City of Arcadia Public Works Services Department at 626-256-6592.

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción, favor de contactar the City of Arcadia Public Works Services Department. Telefono: 626-256-6592.

此份有关你的食水报告,内有重要资料和讯息,请找他人为你翻译及解释清楚。

City of Arcadia Public Works Services Department. 626-256-6592.