



CALIFORNIA
AMERICAN WATER

2016 ANNUAL Water Quality Report

LARKFIELD | PWS ID: 4910023





RICHARD SVINDLAND
President

A Message from California American Water President RICHARD SVINDLAND

Dear Customer,

On behalf of California American Water, I am pleased to share with you our 2016 Consumer Confidence Report, which provides data on your local water quality.

2016 was the fifth consecutive year we faced a drought in California. Accordingly, I want to thank you for your continued water conservation efforts. The drought was a good reminder of what a precious resource water is and how much we can do to reduce our use.

I like to think of this as our “report card” that reflects how well we were able to provide high-quality water service to our customers last year. In particular, I want to draw your attention to the sections of this report related to lead that demonstrate our compliance with the lead standard and provide helpful information for customers wishing to learn more about this topic.

In 2016, we invested more than \$60 million in local infrastructure across California to ensure the safety and reliability of the facilities and technology needed to draw and treat water. These investments also help us provide high-quality water service that remains an exceptional value, costing customers about a penny per gallon.

Water is essential for public health, fire protection, economic development and overall quality of life, and we continue to supply water that meets or surpasses all state and federal water quality standards. California American Water’s employees are committed to ensuring that quality water keeps flowing today and well into the future.

Sincerely,

A handwritten signature in dark ink, appearing to read "Richard Svindland". The signature is fluid and cursive, written over a white background.

RICHARD SVINDLAND
President

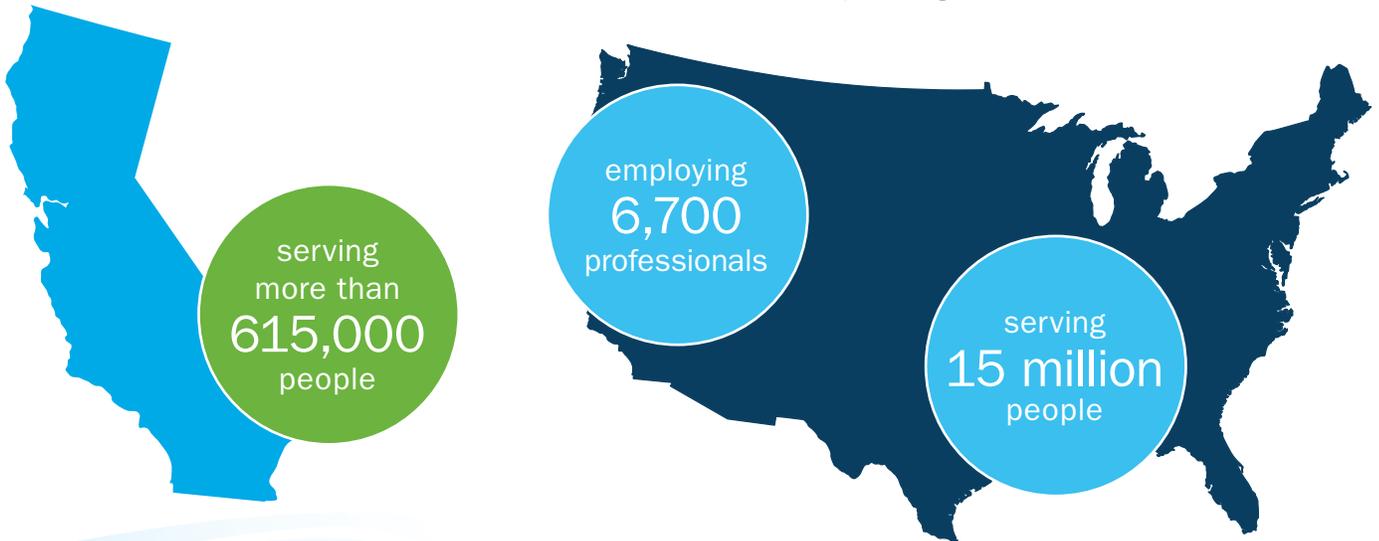


Our Commitment to Quality

Once again, we proudly present our Annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). This CCR covers compliance testing completed through December 2016. We are pleased to tell you that our compliance with state and federal drinking water regulations remains exemplary. As in the past, we are committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, environmental compliance, sustainability and community education while continuing to serve the needs of all our water users.

About California American Water (CAW) and American Water (AW)

California American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services. American Water is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. The company employs 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting www.amwater.com.





What Is a Consumer Confidence Report (CCR)?

The Consumer Confidence Report (CCR) is an annual water quality report containing data that California American Water and all associated water purveyors collected during the past year. CCRs let consumers know what contaminants, if any, are in their drinking water as well as any related health effects. CCRs also include details about where your water comes from and how it is treated. Additionally, they educate customers on what it takes to deliver safe drinking water and highlight the need to protect drinking water sources.

In 2016, we collected numerous samples at various sampling points in your water system. The water quality data presented is a combination of data compiled from our nationally recognized water quality laboratory and local commercial laboratories; all certified in drinking water testing by the State Board's Division of Drinking Water. If you have any questions about this report or your drinking water, please contact our Customer Service Center at (888) 237-1333.





About Your Water

The Larkfield water system is served by wells that pump water from the Glen Ellen formation. California American Water uses drinking water treatment technologies to remove naturally occurring arsenic, iron, and manganese as well as chlorinating the water to ensure that it meets bacteriological quality standards. We also purchase water from the Sonoma County Water Agency (SCWA). Water purchased from SCWA originates from Ranney Collectors and wells along the Russian River in the Santa Rosa Plain. The water supply is distributed for residential and commercial use.





Notice of Source Water Assessment (SWA)

An assessment of the drinking water sources in the Larkfield system was completed in October 2001. Although not associated with any detected contaminants the sources are considered most vulnerable to the following: agricultural drainage, sewer collection systems, golf courses, high-density housing, parks, storm drain discharge points, drinking water treatment plants, gas stations, utility stations (maintenance areas), agricultural and irrigation wells, parking lots, and dry cleaners.

A copy of the completed assessment may be viewed at: State Water Resources Control Board, Division of Drinking Water, Sonoma District Office, 50 D Street, Suite 200, Santa Rosa, CA 95404.





What Are the Sources of Contaminants?

The sources of drinking 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 can pick up substances resulting from animal or human activity and even radioactive material. In order to ensure that tap water is safe to drink, USEPA and the State Water Resources Control Board set regulations limiting the amount of certain contaminants in water provided by public water systems. Contaminants that may be present in source water include:

Organic Chemical Contaminants

including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and may also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Inorganic Contaminants,

such as salts and metals, which can be naturally occurring or may result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and Herbicides,

which may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.

Microbial Contaminants,

such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Radioactive Contaminants,

which can be naturally occurring or may be the result of oil and gas production and mining activities.

FLUORIDE

Fluoride is a naturally occurring substance. It can be present in drinking water from two sources:

1. **By nature** when groundwater comes into contact with fluoride-containing minerals naturally present in the earth; or
2. **By a water purveyor** through addition of fluoride to the water they are providing in the distribution system.

In the Larkfield system, all fluoride in the water is from naturally occurring minerals and the concentrations are well below the limits for contaminants in drinking water set by the USEPA and State Water Resources Control Board, Division of Drinking Water.



ARSENIC

While your drinking water meets the state and federal standard for arsenic, it does contain low levels of arsenic. The standard set for arsenic balances the current understanding of arsenic's possible health effects against the costs of removing it from drinking water. The U.S. Environmental Protection Agency 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 is linked to other health effects such as skin damage and circulatory problems. Compliance with the arsenic standard is based on the running annual average of four consecutive quarters of monitoring.



RADON

Radon is a radioactive gas and known human carcinogen that you cannot see, taste, or smell. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can also get into indoor air when released from tap water while showering, washing dishes, or doing other household activities. Radon entering the home through tap water usually produces minor

amounts of radon in indoor air compared to radon entering the home through soil. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air inside. Testing is inexpensive and easy. You should pursue radon removal for your home if the level of radon in your

air is four picocuries per liter of air (pCi/L) or higher. There are simple, relatively inexpensive ways to fix a radon problem. For additional information, call your state radon program at (800) 745-7236, the USEPA Safe Drinking Water Hotline at (800) 426-4791, or the National Safety Council's Radon Hotline at (800) SOS-RADON.



LEAD

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. California American Water 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 two 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 www.epa.gov/lead.





Educational Information – Special Health Information

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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. USEPA/CDC guidelines on appropriate means to lessen the risk of infection by microbial contaminants are available through the USEPA's Safe Drinking Water Hotline at (800) 426-4791.





Measurements

Water is sampled and tested consistently throughout the year to ensure the best possible quality. Contaminants are measured in:

- Parts per million (ppm) or milligrams per liter (mg/L)
- Parts per billion (ppb) or micrograms per liter ($\mu\text{g/L}$)
- Parts per trillion (ppt) or nanograms per liter (ng/L)
- Grains per gallon (grains/gal) – A measurement of water hardness often used for sizing household water softeners. One grain per gallon is equal to 17.1 mg/L of hardness.
- MicroSiemens per centimeter ($\mu\text{S/cm}$) – A measurement of a solution’s ability to conduct electricity.
- Nephelometric Turbidity Units (NTU) – A measurement of the clarity of water. Turbidity in excess of 5 NTU is noticeable to the average person.
- PicoCuries per liter (pCi/L) – A measurement of radioactivity in water.

PARTS PER MILLION:

1 second
in 12 days

PARTS PER BILLION:

1 second
in 32 years

PARTS PER TRILLION:

1 second
in 32,000 years





How to Read This Table

California American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2016, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the “Definition of Terms” section.

- 1 Starting with a **Substance**, read across.
- 2 **Year Sampled** is usually in 2016 or year prior.
- 3 **MCL** shows the highest level of substance (contaminant) allowed.
- 4 **MCLG** is the goal level for that substance (this may be lower than what is allowed).
- 5 **Average Amount Detected** represents the measured amount (less is better).
- 6 **Range** tells the highest and lowest amounts measured.
- 7 A **No** under **Violation** indicates government requirements were met.
- 8 **Major Sources in Drinking Water** tells where the substance usually originates.

Unregulated substances are measured, but maximum allowed contaminant levels have not been established by the government.

Water Quality Results

Regulated Substances

Substance (Units)	Year Sampled	MCL	PHG (MCLG)	Larkfiled			SCWA		Violation	Major Sources In Drinking Water
				Average Amount Detected	Range		Average Amount Detected	Range Low - High		
					Low	High				
Arsenic (ppb)	2015 - 2016	10	0.004	4.1	3.0	5.0	ND	ND	No	Erosion of natural deposits; Runoff from orchards; Glass, and electronics production wastes
Fluoride (ppm) (naturally occurring)	2015 - 2016	2	1	0.16	0.16		0.11	0.10 - 0.11	No	Erosion of natural deposits; Discharge from fertilizer and aluminum factories

Distribution System Monitoring

Chlorine (ppm)	2016	MRDL=4.0	MRDLG = 4.0	0.70	0.32	1.1	NR	NR	No	Treatment chemical used to disinfect drinking water
Haloacetic Acids (ppb) ¹	2016	60	NA	4.9	4.9		5.9	1.6 - 15	No	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb) ¹	2016	80	NA	17	17		16	9.5 - 28	No	By-product of drinking water disinfection

¹The "Average Amount Detected" is the Highest Running Annual Average

Secondary Substances

Substance (Units)	Year Sampled	SMCL	Larkfiled District			SCWA		Violation	Major Sources In Drinking Water
			Average Amount Detected	Range		Average Amount Detected	Range Low - High		
				Low	High				
Chloride (ppm)	2015 - 2016	500	19	19		5.2	5.0 - 5.6	No	Runoff/leaching from natural deposits; Seawater influence
Manganese (ppb)	2016	50	ND	ND	118	ND	ND	No	Leaching from natural deposits; Industrial wastes
Specific Conductance (umhos/cm)	2015 - 2016	1,600	380	380		242	230 - 260	No	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2015 - 2016	500	10.2	10		13	12 - 14	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2015 - 2016	1,000	270	270		134	71 - 170	No	Runoff/leaching from natural deposits

Lead and Copper (tap water samples)

Substance (Units)	Year Sampled	Action Level	PHG (MCLG)	Number of Samples	Amount Detected (90th Percentile)	Homes Above Action Level	Violation	Major Sources In Drinking Water
Copper (ppm)	2016	1.3	0.3	21	0.384	0	No	Internal corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2016	15	0.2	21	3	0	No	Internal corrosion of household plumbing systems; Erosion of natural deposits; Discharges from industrial manufacturers

Additional Water Quality Parameters of Interest

This table shows average levels of additional water quality parameters that are often of interest to consumers. The averages shown are calculated from the levels detected at each source used to supply water in 2016. Values may vary from day-to-day. There are no health-based limits for these substance in drinking water.

Substance (Units)	Year Sampled	Larkfield District			SCWA	
		Average Amount Detected	Range		Average Amount Detected	Range
			Low	High		Low - High
Alkalinity as CaCO ₃ (ppm)	2015 - 2016	150	150		100	95 - 110
Calcium (ppm)	2015 - 2016	19	19		20	18 - 22
Magnesium (ppm)	2015 - 2016	17	17		13	12 - 14
pH	2015 - 2016	7.6	7.6		7.4	7.3 - 7.5
Radon (pCi/L)	2006, 2016	321	267	401	234	171 - 382
Silica (ppm)	2015	80	80		NR	NR
Sodium (ppm)	2015 - 2016	37	37		8.6	7.9 - 9.5
Total Hardness as CaCO ₃ (ppm)	2015 - 2016	110	110		102	93 - 112
Total Hardness as CaCO ₃ (grains/gallon)	2015 - 2016	6.4	6.4		5.9	5.4 - 6.5

Hardness is the sum of polyvalent cations present in the water, generally magnesium and calcium. The cations are usually naturally occurring

Definitions of Terms Used in This Report

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

DDW: Division of Drinking Water

LRAA: Locational Running Annual Average

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. Secondary MCLs (SMCL) 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 allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL): The highest level of 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.

MFL: Million fibers per liter.

micromhos per centimeter ($\mu\text{mhos/cm}$): A measure of electrical conductance.

NA: Not applicable

ND: Not detected

Nephelometric Turbidity Units (NTU): Measurement of the clarity, or turbidity, of the water.

Notification Level (NL): The concentration of a contaminant, which, if exceeded, requires notification to DDW and the consumer. Not an enforceable standard.

pH: A measurement of acidity, 7.0 being neutral.

picocuries per liter (pCi/L): Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

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

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

parts per trillion (ppt): One part substance per trillion parts water, or nanograms per liter.

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

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 EPA.

RAA: Running Annual Average

Secondary Maximum Contaminant Level (SMCL): Secondary MCLs are set to protect the odor, taste, and appearance of drinking water

SWRCB: State Water Resources Control Board

TON: Threshold Odor Number

Total Dissolved Solids (TDS): An overall indicator of the amount of minerals in water.

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

Variations and Exemptions: State or USEPA permission not to meet an MCL or utilize a treatment technique under certain conditions.

%: Percent



How to Contact Us

If you have any questions about this report, your drinking water, or service, please call California American Water's Customer Service toll free at (888) 237-1333.

Water Information Sources

California American Water

www.californiaamwater.com

State Water Resources Control Board, Division of Drinking Water

www.waterboards.ca.gov/drinking_water/programs/index.shtml

United States Environmental Protection Agency (USEPA)

www.epa.gov/safewater

Safe Drinking Water Hotline

(800) 426-4791

Centers for Disease Control and Prevention

www.cdc.gov

American Water Works Association

www.awwa.org

Water Quality Association

www.wqa.org

National Library of Medicine/National Institute of Health

www.nlm.nih.gov/medlineplus/drinkingwater.html

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at (888) 237-1333.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al (888) 237-1333.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau peb ntawm (888) 237-1333.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電(888) 237-1333 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया (888) 237-1333 पर हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону (888) 237-1333.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa (888) 237-1333.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số (888) 237-1333.