



CALIFORNIA
AMERICAN WATER

2016 ANNUAL Water Quality Report

DUARTE | PWS ID: 1910186





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

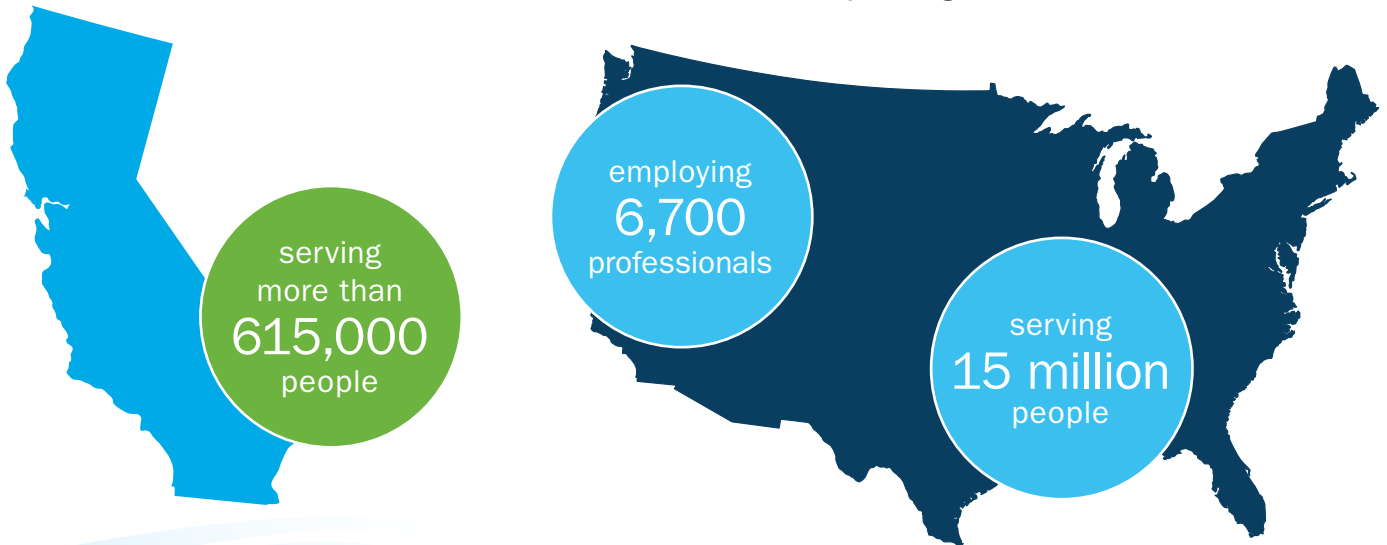


Our Commitment to Quality

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.

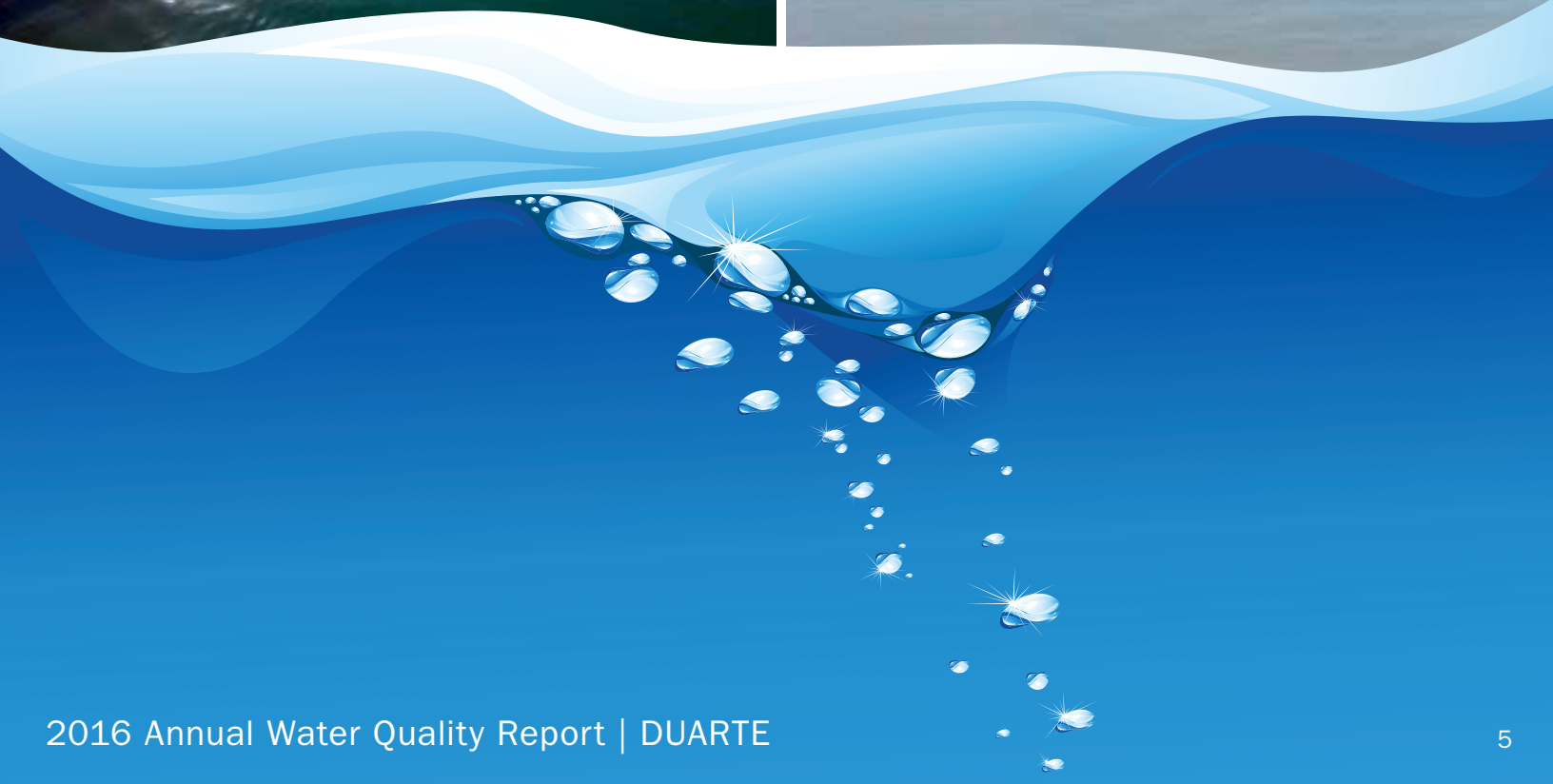
In 2016, we collected numerous samples at various sampling points in your water system. The water quality data presented is a combination of data compiled from our nationally recognized water quality laboratory and local commercial laboratories; all certified in drinking water testing by the State Board's Environmental Laboratory Accreditation Program. 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

Duarte is served entirely by groundwater sources from the Main San Gabriel Basin. Chlorine addition is the only drinking water treatment used in your water system. Chlorination ensures disinfection and maintains the bacteriological water quality in the distribution system. The water supply is distributed for residential, commercial, and industrial use in the cities of Duarte and Bradbury; portions of Azusa, Irwindale, and Monrovia; and also some unincorporated areas of Los Angeles County.





Notice of Source Water Assessment (SWA)

An assessment of the drinking water sources for the California American Water - Duarte water system was completed in February 2003. No man-made contaminants have been detected in most of the groundwater supplies.

The sources are considered vulnerable to the following activities (although not associated with any detected chemicals): historic waste dumps/landfills, chemical/petroleum processing/storage, historic gas stations, historic and active mining operations, research laboratories, and animal feeding operations.

A copy of the completed assessment may be viewed at California American Water, 8657 Grand Avenue, Rosemead, CA 91770. You may request a summary of the assessment be sent to you by contacting Shauna Racicot, Water Quality & Environmental Compliance Manager, by phone at (619) 446-4768 or by email at shauna.racicot@amwater.com.





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.

California American Water does not add fluoride to drinking water it produces.



UNREGULATED CONTAMINANT MONITORING RULE (UCMR)

The USEPA created the Unregulated Contaminants Monitoring Rule (UCMR) to assist them in the determining the occurrence of unregulated contaminants in drinking water and whether new regulations are warranted. The first Unregulated Contaminants Monitoring Rule (UCMR1) testing was completed

in 2003 for a list of contaminants specified by the USEPA. Unregulated contaminants are those for which the USEPA has not established drinking water standards. UCMR2 testing was conducted between November 2008 and August 2009, and UCMR3 assessment monitoring was conducted between January

2015 and December 2015. The results from the UCMR monitoring are reported directly to the USEPA. The results of the 2016 unregulated contaminant monitoring are incorporated in the data tables in this report as appropriate. For more information, contact our Customer Service Center at (888) 237-1333.



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.

GROUNDWATER QUALITY							
Substance (units)	Year Sampled	MCL	PHG (MCLG)	Average Amount Detected	Range Low-High	Violation	Typical Source
Primary Drinking Water Standards							
Arsenic (ppb)	2016	10	0.004	ND	ND - 3.1	No	Erosion of natural deposits
Barium (ppm)	2016	1	2	0.11	ND - 0.2	No	Discharge of oil drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	2016	2.0	1	0.29	0.12 - 0.39	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate as N (ppm)	2016	10	10	0.97	0.64 - 1.8	No	Runoff and leaching from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Uranium (pCi/L)	2015	20	0.43	ND	ND - 1.7	No	Erosion of natural deposits
Secondary Drinking Water Standards							
Chloride (ppm)	2016	500	NS	42	27 - 66	No	Runoff/leaching from natural deposits; Seawater influence
Copper (ppm)	2016	1.0	0.3	ND	ND - 0.234	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron (ppb)	2016	300	NS	ND	ND - 350	No	Leaching from natural deposits; Industrial wastes
Odor (units)	2016	3	NS	ND	ND - 2	No	Naturally-occurring organic materials
Specific Conductance (mS/cm)	2016	1,600	NS	510	360 - 610	No	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2016	500	NS	34	19 - 57	No	Runoff/leaching from natural deposits; Industrial wastes
Total Dissolved Solids (ppm)	2016	1,000	NS	320	210 - 370	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2016	5	NS	0.3	ND - 1.3	No	Soil runoff
Unregulated Substances Requiring Monitoring							
Sodium (ppm)	2016	NS	NS	25	19 - 33	NS	Salt present in the water and is generally naturally occurring
Total Hardness as CaCO ₃ (ppm)	2016	NS	NS	200	130 - 240	NS	Sum of the polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Total Hardness as CaCO ₃ (grains per gallon)	2016	NS	NS	12	7.6 - 14	NS	
Unregulated Substances Requiring Monitoring in the Distribution System							
Substance (units)	Year Sampled	Notification Level	PHG (MCLG)	Average Amount Detected	Range Low-High		
Chlorate (ppb)	2013	800	NS	200	190 - 200		
Chromium, Hexavalent (ppb) *	2013	MCL = 10	0.02	0.38	0.21 - 0.54		
Chromium, Total (ppb) **	2013	MCL = 50	(100)	0.7	0.3 - 1.1		
Molybdenum (ppb)	2013	NS	NS	1.8	1.6 - 2		
Strontium (ppb)	2013	NS	NS	426	378 - 474		
Vanadium (ppb)	2013	50	NS	1.9	1.8 - 1.9		

DISTRIBUTION SYSTEM WATER QUALITY

Bacterial Results

Substance (units)	Year Sampled	MCL	MCLG	Highest Percentage Detected	Violation	Typical Source
Total Coliform Bacteria	2016	5.0% of monthly samples are positive	0	1.6%	No	Naturally present in the environment

Disinfectant Residual and Disinfection By-Products

Substance (units)	Year Sampled	MCL	PHG (MCLG)	Average Amount Detected	Range Low-High	Violation	Typical Source
Chlorine (ppm)	2016	MRDL = 4.0 (as Cl ₂)	MRDLG = 4.0 (as Cl ₂)	1.1	0.57 - 1.9	No	Drinking water disinfectant added for treatment
Total Trihalomethanes (TTHM) (ppb)	2016	80	NS	8.6	1.8 - 13	No	By-product of drinking water disinfection
Haloacetic Acids (HAA) (ppb)	2016	60	NS	1.4	ND - 2.2	No	By-product of drinking water disinfection

Lead and Copper at Residential Taps

Substance (units)	Year Sampled	Action Level	PHG	Number of Samples	Amount Detected at the 90th Percentile	Number of Homes Above Action Level	Violation	Typical Source
Copper (ppm)	2015	1.3	0.3	31	0.175	0	No	Internal corrosion of household plumbing system; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2015	15	0.2	31	ND	0	No	Internal corrosion of household water plumbing system; Discharges from industrial manufacturers; Erosion of natural deposits

Unregulated Substances Requiring Monitoring in the Distribution System

Substance (units)	Year Sampled	Notification Level	PHG (MCLG)	Average Amount Detected	Range Low-High
Chlorate (ppb)	2013	800	NS	200	190 - 200
Chromium, Hexavalent (ppb) *	2013	MCL = 10	0.02	0.38	0.21 - 0.54
Chromium, Total (ppb) **	2013	MCL = 50	(100)	0.7	0.3 - 1.1
Molybdenum (ppb)	2013	NS	NS	1.8	1.6 - 2
Strontium (ppb)	2013	NS	NS	426	378 - 474
Vanadium (ppb)	2013	50	NS	1.9	1.8 - 1.9



Additional Unregulated Substances ***

Substance (units)	Year Sampled	Average Amount Detected	Range Low-High
1,4-Dioxane (ppb) ****	2016	ND	ND - 2.6
Alkalinity as CaCO ₃ (ppm)	2016	150	110 - 190
Calcium (ppm)	2016	58	40 - 73
Magnesium (ppm)	2016	13	7.7 - 17
pH (units)	2016	8	7.8 - 8.2
Silica (ppm)	2016	18	16 - 21

* Hexavalent chromium was detected below the DDW Detection Limit for Purposes of Reporting (DLR) of 1 ppb

** Total chromium was detected below the DDW DLR of 10 ppb

*** Average levels of additional water quality parameters, which are often of interest to consumers. Values shown here are averages of operating data for 2016. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

**** 1,4-Dioxane has a Notification Level of 1 ppb. Some people who use water containing 1,4-dioxane in excess of the Notification Level over many years may experience liver or kidney problems and may have an increased risk of getting cancer, based on studies in laboratory animals.

ND = Not Detected

NS = No Standard

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 (State Board), Division of Drinking Water (DDW)

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

Metropolitan Water District of Southern California

www.mwdh2o.com

West Basin Municipal Water District

www.westbasin.org

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 pab 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.