



# 2015 Annual Water Quality Report

Dunnigan  
PWS ID: 5700712



## A Message from California American Water President Rob MacLean

Dear Customer:

The attached water quality report is our “report card” that gives you the results of the quality of the water that was provided to your business or home in 2015. Since 2015 was the 4th year of the worst drought to hit California in 100 years, I want to thank you for your water conservation efforts throughout last year. The drought is a good reminder of how precious water is, and how much we can do to reduce our use when needed.

This report includes information about the quality of the water we provide to our customers. As you read through our Annual Water Quality Report, you will see that we continue to supply water that meets or surpasses all state and federal water quality standards. Better yet, the price you pay for this high quality water service remains about one penny per gallon.

Due to recent events in Flint, Michigan, 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. You can find more information on our [lead fact sheet](#), or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

Water is still an exceptional value when you consider the facilities and technology needed to draw water from the source and treat it, along with miles and miles of pipeline hidden below the ground to bring water to your tap. What’s more, our plant operators, water quality experts, engineers and maintenance crews work around the clock to make sure that quality water is always there when you need it. Delivering reliable, high-quality water service also requires significant investment to maintain and upgrade aging facilities. In 2015 alone, we invested more than more than \$64 million in local infrastructure across California.

Because water is essential for public health, fire protection, economic development and overall quality of life, California American Water’s employees are committed to ensuring that quality water keeps flowing not only today but well into the future.

Sincerely,

Robert G. MacLean  
President

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। यह इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत है, 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.

## Our Commitment to Quality

Our Annual Water Quality Report covers compliance testing completed through December 2015. California American Water is committed to delivering the best quality drinking water. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the needs of all our water users.

## About California American Water

California American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to more than 615,000 people.

## About American Water

American Water is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. Marking its 130th anniversary this year, 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](http://www.amwater.com).

### What is a Consumer Confidence Report (CCR)?

To comply with state and U.S. Environmental Protection Agency (USEPA) regulations, California American Water issues a report annually describing the quality of your drinking water. This report is also called an Annual Water Quality Report and the purpose of this report is to raise your understanding of drinking water and awareness of the need to protect your drinking water sources. In 2015, numerous tests at various sampling points were conducted in your water systems. This report provides an overview of last year's water quality. It includes details about where your water comes from and what it contains. The data presented in this report was provided by the Yolo County laboratory certified in drinking water testing by the State Water Resources Control Board, Division of Drinking Water (formerly California Department of Public Health).

If you have any questions about this report or your drinking water, please call our Customer Service Center at (888) 237-1333

### Share this Report

Landlords, businesses, schools, hospitals and other groups are encouraged to share this important water quality information with water users at their location who are not billed customers of California American Water and therefore do not receive this report directly.

### About Your Water

Water in the Dunnigan system comes from wells that pump groundwater from aquifers in the area. All of these wells are located within the geographic area of our Dunnigan service area. The water supplied is chlorinated to ensure that it meets bacteriological quality standards. The water supply is distributed for residential and commercial use.

### Hexavalent Chromium

In 2015, the State of California established a new water quality standard for hexavalent chromium – also known as Cr6 or Chrome 6. Hexavalent chromium (Cr6) can be found naturally occurring in ground water throughout the region from erosion of chromium deposits, or can be produced by industrial processes. The California Cr6 drinking water standard is stricter than the federal standard, or standards of other states. The current levels of Cr6 within the Dunnigan system are above the state established water quality standard. The levels of Cr6 in the drinking water within the Dunnigan system have not



changed – it is the state standard that has become more stringent. California American Water will begin working on treatment for the Dunnigan system in the coming years. In the meantime, customers will be receiving regular notifications that drinking water does not meet state Cr6 standards within the Dunnigan System.



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 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that are not too costly. 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.

#### What are the Sources of Contaminants?

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 human activity. Groundwater sources are typically less susceptible to surficial contaminants than surface water systems.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board, Division of Drinking Water prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Contaminants that may be present in source water include:

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

**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.

**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.

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

#### Source Water Protection Tips for Consumers

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

- Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water sources.
- Pick up after your pets.
- Dispose of chemicals properly; take used motor oil and antifreeze to a recycling center. ([www.emd.saccounty.net/HowDoI/DisposeofHouseholdHazardousWaste.html](http://www.emd.saccounty.net/HowDoI/DisposeofHouseholdHazardousWaste.html))
- Do not dispose of unused medications down the drain.
- Use environmentally friendly soaps and detergents when washing your vehicles.

#### 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. You can obtain more information about contaminants and potential health effects 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. 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA and the Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

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 idle 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

#### 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](http://www.californiaamwater.com)

**State Water Resources Control Board, Division of Drinking Water**  
[www.waterboards.ca.gov/drinking\\_water/programs/index.shtml](http://www.waterboards.ca.gov/drinking_water/programs/index.shtml)

**United States Environmental Protection Agency (USEPA)**  
[www.epa.gov/safewater](http://www.epa.gov/safewater)

**Safe Drinking Water Hotline**  
(800) 426-4791

**Centers for Disease Control and Prevention**  
[www.cdc.gov](http://www.cdc.gov)

**American Water Works Association**  
[www.awwa.org](http://www.awwa.org)

**Water Quality Association**  
[www.wqa.org](http://www.wqa.org)

**National Library of Medicine/National Institute of Health**  
[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)

#### How to Read This Table

The results of water quality monitoring conducted by the former system operator are reported in the adjacent tables.

While some monitoring was conducted in 2015, 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.

Starting with a **Substance**, read across. **Year Sampled** is usually 2015 or the most recent data from a prior year. **MCL** shows the highest level of the substance (contaminant) allowed. **PHG** (or **MCLG**) is the goal level for that substance (this may be lower than what is allowed). **Average Amount Detected** represents the (calculated) average level of that substance from the drinking water sources that California American Water used in 2015. **Range** tells the highest and lowest amounts measured. A “**No**” under **Violation** indicates regulatory requirements were met. **Major Sources in Drinking Water** tells where the substance usually originates.

#### 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.

**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.

**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 the U.S. Environmental Protection Agency.

**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.

**micromhos per centimeter (µmhos/cm):** A measure of electrical conductance.

**Million fibers per liter (MFL):** The number of asbestos fibers (in millions) per liter that are greater than 10 microns in length.

**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 the State Water Resources Control Board, Division of Drinking Water and the consumer. Not an enforceable standard.

**NR:** Not reported

**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 per water, or milligrams per liter.

**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).

**Primary Drinking Water Standard (PDWS):** MCLs and MRDLs 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

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

**Secondary Maximum Contaminant Level (SMCL):** SMCLs are set to protect the aesthetic properties of drinking water (odor, taste and appearance).

**TOC:** Total Organic Carbon

**TON:** Threshold Odor Number

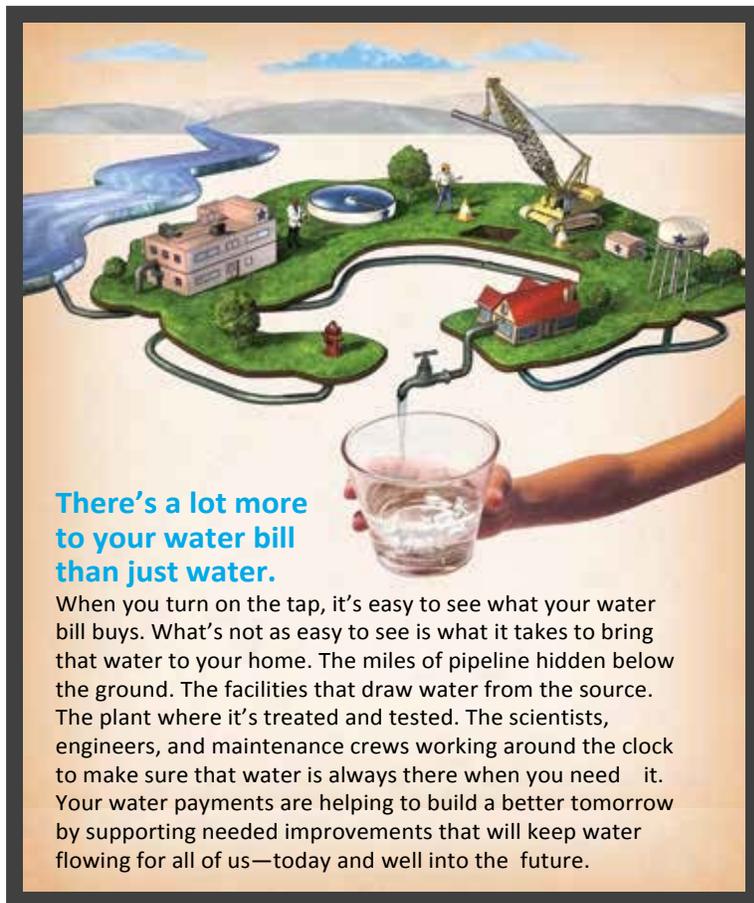
**Total Dissolved Solids:** An overall indicator of the amount of minerals in water.

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

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

### Water Quality Statement

Last year Dunnigan system did not violate any federal water quality standards. The California Cr6 drinking water standard is stricter than the federal standard, or standards of other states. The current levels of Cr6 within the Dunnigan system are above the state established water quality standard. California American Water vigilantly safeguards its water supplies and will begin working on treatment for the Dunnigan system in the coming years



## Water Quality Results

### Regulated Substances

Substance (Units)	Year Sampled	MCL	PHG (MCLG)	Average Amount Detected	Range		Violation	Major Sources In Drinking Water
					Low	High		
Barium (ppm)	2013	1	2	0.4	0.4		No	Discharges of oil drilling wastes and from metal refineries; Erosion of natural deposits
Chromium (ppb)	2013	50	(100)	34	34		No	Discharge from steel and pulp mills; Erosion of natural deposits
Hexavalent Chromium (ppb)	2015	10	0.02	36	33	40	No	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Nitrate as NO3 (ppm)	2015	45	45	12	12		No	Runoff and leaching from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Uranium (pCi/L)	2009	20	0.43	ND	ND	ND	No	Erosion of natural deposits

### Distribution System Monitoring

Chlorine (ppm)	2014	MRDL=4.0	MRDLG=4.0	0.20	0.15	0.30	No	Treatment chemical used to disinfect drinking water
Total Trihalomethanes (TTHM) (ppb) <sup>1</sup>	2014	80	N/A	5.3	5		No	By-product of drinking water disinfection

<sup>1</sup>The "Average Amount Detected" is the Highest Running Annual Average

### Secondary Substances

Substance (Units)	Year Sampled	SMCL	Average Amount Detected	Range		Violation	Major Sources In Drinking Water
				Low	High		
Chloride (ppm)	2013	500	21	21		No	Runoff/leaching from natural deposits
Manganese (ppb)	2013	50	0.42	0.42		No	Leaching from natural deposits
Specific Conductance (mmhos/cm)	2013	1,600	632	632		No	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2013	500	17.3	17.3		No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2013	1,000	366	366		No	Runoff/leaching from natural deposits; Industrial wastes

### 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)	2014	1.3	0.3	5	0.28	0	No	Internal corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2014	15	0.2	5	ND	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 2014. Values may vary from day-to-day. There are no health-based limits for these substance in drinking water.

Substance (Units)	Year Sampled	Average Amount Detected	Range	
			Low	High
Sodium (ppm)	2013	20	20	
Total Hardness as CaCO3 (ppm)	2013	175	175	