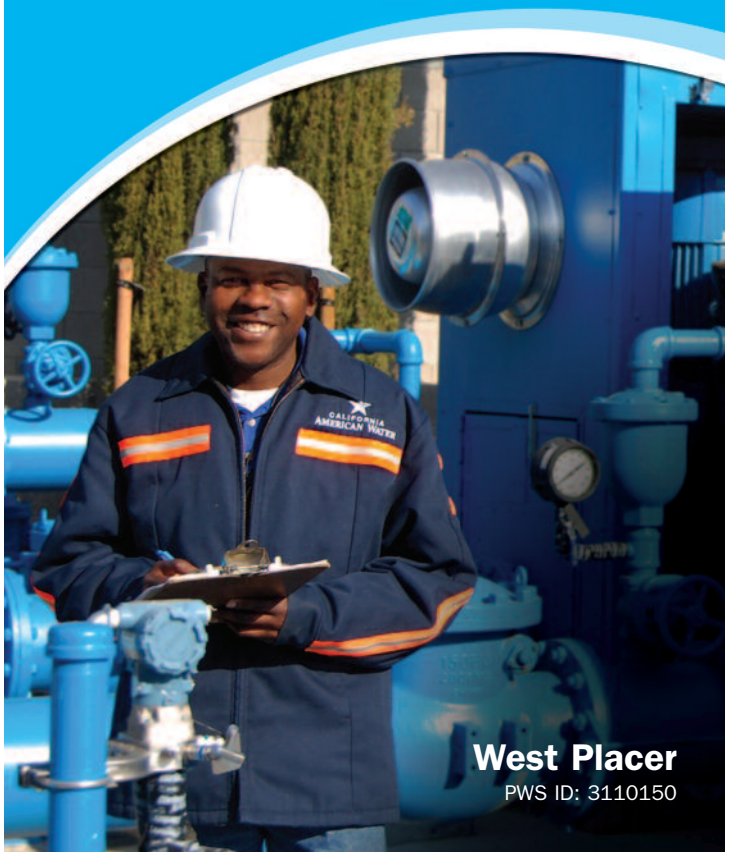
2011 Annual

Water Quality Report

CALIFORNIA AMERICAN WATER



West Placer

PWS ID: 3110150

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.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

Chi tiết này thật quan trọng. Xin nhờ người dịch cho quý vị.

A Message from the California American Water President

California American Water is proud to be your local water service provider and I am pleased to share with you good news about the quality of your drinking water. Each year, we provide you with our Annual Water Quality Report – and like so many years prior – you'll find that we continue to supply water that meets or surpasses both state and federal water quality regulations.

This doesn't happen by chance. It requires having the right team of experts and technologies in place. Delivering high-quality, reliable water service to your tap around the clock also requires significant investment in our water infrastructure. In 2011 alone, we invested more than $54 million in water system improvements statewide. From upgrading our treatment facilities to replacing aging water pipelines, we invest prudently and with purpose. And, because we invest our dollars responsibly, we provide our water at less than a penny per gallon; an exceptional value for a service that is so essential to our daily lives.

We hope you agree, it's worth every penny and worth learning more about. Please, take the time to review this report. It provides details about the source and quality of your drinking water using data from water quality testing conducted in your local water system through December 2011. For an electronic copy of this report, visit us online at www.amwater.com/caaw/.

At California American Water, our customers are our top priority, and we are committed to providing you with the highest quality drinking water and service possible now and in the years to come.

Sincerely,

Rob MacLean
President, California American Water

Continuing our Commitment

Once again, we proudly present our Annual Water Quality Report. This document covers compliance testing completed through December 2011. 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, and community education while continuing to serve the needs of all our water users.

California American Water, a wholly owned subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to approximately 600,000 people. California American Water, with the support of American Water, has the technical support of a global network and the local knowledge to provide the highest quality water with personal service.

Founded in 1886, American Water is the largest investor-owned U.S. water and wastewater utility company. With headquarters in Voorhees, N.J., the company employs approximately 7,000 dedicated professionals who provide drinking water, wastewater and other related services to approximately 15 million people in more than 30 states, as well as parts of Canada. More information can be found by visiting www.amwater.com.

What is a Water Quality Report?

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. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect your drinking water sources. Since 2009, we have conducted tests for over 250 contaminants at numerous sampling points in your water system, all of which were below state and federal maximum allowable levels. This report provides an overview of last year's (2011) water quality. It includes details about where your water comes from and what it contains. The data presented in this report is a combination of data from our nationally recognized main water quality lab and commercial laboratories, all certified in drinking water testing by the California Department of Public Health.

If you have any questions about this report or your drinking water, please call our Customer Service Center toll free 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.

LESS THAN A PENNY

Did you know that you pay less than a penny for a gallon of tap water?

We invest millions of dollars each year in our treatment and distribution facilities to ensure that you receive quality, reliable water service around the clock. At the same time, you pay less than a penny per gallon. For most customers, the water bill is the lowest utility bill they pay each month.

That's an exceptional value.

WE CARE ABOUT WATER. IT'S WHAT WE DO.

About Your Water

Water in the West Placer system is purchased from the Placer County Water Agency through the City of Roseville. This water comes from the Folsom Lake Reservoir. Drinking water treatment technologies used by the City of Roseville include conventional treatment (coagulation, sedimentation, filtration, and disinfection). The pH of the water is adjusted to control corrosion in the distribution system, and fluoride is added to promote dental health.

Notice of Source Water Assessment

A source water assessment was conducted for the City of Roseville's water supply from Folsom Lake in March 2002. The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: Folsom Lake State Recreation Area facilities (marina, restrooms, recreational areas, parking lots, and storm drains) and residential sewer and septic systems.

Although not associated with any detected contaminants, the source is also considered vulnerable to the following activities: illegal activities and dumping; fertilizer, pesticide and herbicide application; and high-density housing developments.

A copy of the complete source water assessment may be viewed at the California Department of Public Health, 1616 Capitol Avenue, Sacramento, CA 95899-7413.

You may request that a summary of the assessment be sent to you by contacting the City of Roseville Water Department at (916) 774-5750.

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 to a recycling center
- Do not dispose of unused medications down the drain
- Use environmentally friendly soaps and detergents when washing your vehicles

How to Contact Us

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

Water Information Sources

California American Water
http://www.amwater.com/caaw/

California Department of Public Health
http://www.cdph.ca.gov/programs/pages/dwp.aspx

United States Environmental Protection Agency (USEPA)
http://water.epa.gov/drink/index.cfm

Safe Drinking Water Hotline: (800) 426-4791

Centers for Disease Control and Prevention
http://www.cdc.gov/

American Water Works Association
http://www.awwa.org/

Water Quality Association
http://www.wqa.org/

National Library of Medicine/National Institute of Health
http://www.nlm.nih.gov/medlineplus/drinkingwater.html

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.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (Department) 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 that are by-products of industrial processes and petroleum production, and can 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.

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 (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 (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 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://www.epa.gov/drink/info/lead/index.cfm.

Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water in most cases will be a small source of radon in indoor air. Radon is a known human carcinogen. 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 in your home. 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 (800) 745-7236, the USEPA Safe Drinking Water Act Hotline (800) 426-4791, or the National Safety Council's Radon Hotline (800) SOS-RADON.

Cryptosporidium Monitoring

Cryptosporidium is a microbial pathogen found in surface waters throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Monitoring indicates the presence of these organisms in source water and/or finished water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their health care provider regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. You can obtain more information on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants by calling the USEPA's Safe Drinking Water Hotline (800) 426-4791.

How to Read This Table

California American Water conducts extensive monitoring to ensure that your water meets water quality standards. The results of our monitoring by California American Water and the City of Roseville are reported in the adjacent tables. While some of the monitoring was conducted in 2011, 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 2011 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 monitoring performed. **Range** tells the highest and lowest amounts measured. A "**No**" under **Violation** indicates that regulatory requirements were met. **Major Sources in Drinking Water** tells where the substance usually originates.

Definition of Terms

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

MCL (Maximum Contaminant Level): 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.

MCLG (Maximum Contaminant Level Goal): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

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 using disinfectants to control microbial contaminants.

NA: Not applicable

ND: Not detected

Notification Level: The concentration of a contaminant which, if exceeded, requires notification to the California Department of Public Health and the consumer. Not an enforceable standard.

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

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

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

pH: A measurement of acidity, 7.0 being neutral.

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 Environmental Protection Agency.

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.

SMCL (Secondary Maximum Contaminant Level): 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.

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

Water Quality Statement

Last year, as in years past, your tap water met USEPA and state drinking water standards. California American Water vigilantly safeguards its water supplies, and once again we are proud to report that our system did not violate any state or federal water quality standards.

Water Quality Results

West Placer

Regulated Substances

Substance (units)	Year Sampled	MCL	PHG (MCLG)	Antelope[1]		West Placer		City of Roseville		Violation	Major Sources in Drinking Water
				Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High		
Arsenic (ppb)	2009 - 2011	10	0.004	3.3	2 - 5	ND	ND	ND	ND	No	Erosion of natural deposits; runoff from orchards; glass, and electronics production wastes
Asbestos (MFL)	2003	7	7	ND	ND - 0.95	ND	ND	ND	ND	No	Internal corrosion of asbestos cement water mains; erosion of natural deposits
Barium (ppm)	2009 - 2011	1	2	ND	ND - 0.104	ND	ND	ND	ND	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium (ppb)	2009 - 2011	50	100	ND	ND - 14	ND	ND	ND	ND	No	Erosion of natural deposits
Fluoride (ppm)	2009 - 2011	0.7 - 1.3[2]	1	0.2[3]	0.2 - 0.3	0.68	0.3 - 0.8	NA	NA	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate as NO_3 (ppm)	2011	45	45	5.8	2.2 - 12.4	ND	ND	ND	ND	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Control of Disinfection Byproduct Precursors (TOC) (ppm)	2011	Treatment requirement if average TOC >2	NA	NA	NA	NA	NA	1.1	0.7 - 1.3	NA	Various natural and man-made sources
Distribution System Monitoring											
Chlorine (ppm)	2011	MRDL = 4.0	MRDLG = 4.0	NA	NA	0.49	0.42 - 0.57	NA	NA	No	Treatment chemical used to disinfect drinking water
Haloacetic Acids (ppb)	2011	80	NA	NA	NA	27.6[4]	ND - 44.6	NA	NA	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	2011	60	NA	NA	NA	51.2[4]	ND - 65.8	NA	NA	No	Byproduct of drinking water disinfection

Secondary Substances

Substance (units)	Year Sampled	SMCL	Antelope[1]		West Placer		City of Roseville		Violation	Typical Source
			Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High		
Chloride (ppm)	2009 - 2011	500	31.7	11 - 65	3.8	3.8	1.6	1.6	No	Runoff/leaching from natural deposits; seawater influence
Color (units)	2009	15	ND	ND - 5	ND	ND	ND	ND	No	Naturally-occurring organic materials
Iron (ppb)	2009	300	ND	ND - 277	ND	ND	ND	ND	No	Leaching from natural deposits
Manganese (ppb)	2009 - 2011	50	ND	ND	ND	ND	30	26 - 34	No	Leaching from natural deposits
Specific Conductance (µmhos/cm)	2009 - 2011	1,600	323	210 - 430	88	88	59	59	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2009 - 2011	500	4.5	4 - 7.3	5.9	5.9	2.8	2.8	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2009 - 2011	1,000	248	200 - 300	58	58	46	46	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2009 - 2011	5	0.31	ND - 2.2	0.13	0.13	0.07	0.07	No	Soil runoff

Turbidity – A Measure of the Clarity of the Water (at the surface water treatment facility from the City of Roseville)

Plant	Year Sampled	MCL	PHG (MCLG)	Highest Single Measurement	Violation	Typical Source
Turbidity (NTU)	2011	TT = 1.0 NTU	NA	0.09	No	Soil runoff
		TT = percentage of samples < 0.3 NTU		99.99%		

Lead and Copper (tap water samples from the West Placer system only)

Substance (units)	Year Sampled	Action Level	PHG (MCLG)	Number of Samples	Amount Detected at 90th Percentile	Homes Above Action Level	Violation	Typical Source
Copper (ppm)	2010	1.3	0.3	30	0.34	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2010	15	0.2	30	2	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 which are often of interest to consumers. The averages shown here are calculated from the levels detected. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

Additional Constituents							
Substance (units)	Year Sampled	Antelope[1]		West Placer		City of Roseville	
		Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High	Average Amount Detected	Range Low-High
Alkalinity as $CaCO_3$ (ppm)	2009	123	97 – 140	30	30	23	16 – 35
Calcium (ppm)	2009 – 2011	19	13 – 23	11	11	6.5	6.5
Magnesium (ppm)	2009 – 2011	13	9 – 19	2	2	2.6	2.6
pH	2009	7.9	7.8 – 8.1	8.6	8.3 – 9.2	8.5	8.2 – 8.7
Radon (pCi/L)	2006	198	ND – 497	ND	ND	NA	NA
Silica (ppm)	2009	84.5	81 – 87	ND	ND	NA	NA
Sodium (ppm)	2009 – 2011	28	16 – 52	4	4	2.6	2.6
Total Hardness as $CaCO_3$ (ppm)	2009 – 2011	100	72 – 140	34	34	27	27
Hexavalent Chromium (ppb)[5]	2011	4.8	0.5 – 10.5	0.13	0.13	ND	ND

[1] Antelope system water was used to supplement the West Placer system from 5/18/2011 to 6/6/2011 when a portion of PCWA's conveyance system failed until it was repaired.
[2] Fluoride Control Range, not an MCL
[3] Water in the Antelope system is not fluoridated, levels detected are from naturally-occurring fluoride.
[4] Highest Running Annual Average
[5] In January 2011, the USEPA asked public water systems to conduct voluntary hexavalent chromium monitoring so that they may gain a better understanding of the nature and occurrence of the element. The data presented here are from the first round of monitoring. Additional monitoring will be conducted in 2012. Both the California Department of Public Health (CDPH) and the USEPA are working toward establishing a regulatory standard for hexavalent chromium in drinking water. For more information on what steps American Water is taking in regard to hexavalent chromium, please visit our website at http://www.amwater.com/caaw/Ensuring-Water-Quality/Chromium-6. For more information on the regulatory process, please follow the link to the CDPH's Hexavalent Chromium web page (www.cdph.ca.gov/certlic/drinkingwater/pages/chromium6.aspx).