

*Annual*  
**WATER**  
**QUALITY**  
**REPORT**

*Reporting Year 2013*



*Presented By*  
**City of Camarillo**

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

PWS ID#: CA5610019

## Meeting the Challenge

The City of Camarillo is pleased to present our annual Water Quality Report with important information about the water we supply to you. This report covers all testing performed between January 1 and December 31, 2013. Our experienced staff routinely collect and test water samples every step of the way to assure you that the water delivered to you is reliable and safe. As in years past, we continue to focus on foresight and planning, efficiency in operations and technology, and excellence in customer service.

Please remember that we are always available to assist you should you ever have any questions or concerns about your water.

## Community Participation

The Camarillo City Council convenes regularly at 5 p.m. on the second and fourth Wednesdays of each month at City Hall, 601 Carmen Drive. We welcome public interest and participation in decisions affecting drinking water, and encourage attendance at these meetings. Visit our Web site at [www.cityofcamarillo.org](http://www.cityofcamarillo.org) for City Council agenda information.

## Where Does My Water Come From?

City of Camarillo Water customers receive local groundwater pumped from the Fox Canyon Aquifer via four city wells. This water is blended with imported water from Calleguas MWD. These wells have the ability to pump up to 8.6 million gallons per day. The imported water provided by Calleguas MWD originates in northern California and is conveyed over 500 miles through the State Water Project's network of reservoirs, aqueducts, and pump stations. After treatment at the Metropolitan Water District Jensen Filtration Plant in the northern San Fernando Valley, the water is carried by pipeline to Ventura County, where it is distributed by Calleguas MWD to more than a half-million Ventura County customers. Additional supplies of the imported water are stored in Lake Bard, Calleguas MWD's reservoir in Thousand Oaks.

## Please help us SAVE WATER!

**A very important message to our customers:**

On January 17, 2014, Governor Jerry Brown proclaimed a drought emergency in California. Governor Brown has asked all Californians to reduce water consumption by 20%.

This year's dry weather has dramatically decreased California's rivers and reservoirs to below-record levels and has heavily impacted our local groundwater supplies.

City water customers must make every effort to conserve water. Here are a few tips:

- Automatic dishwashers use approximately 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- On an average, up to 70% of residential water is used outdoors, and often landscape is over-watered. Check your irrigation system frequently to make sure you are only watering as much as needed. Replace batteries in controllers regularly so that power outages won't affect your watering schedule.
- When watering by hand or washing vehicles, use a positive shut-off nozzle on your hose.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year!
- Use your water meter to detect hidden leaks. Simply turn off all taps and water-using appliances and note the read on the dial of the meter. Then check the meter after 15 minutes. If it moved, you have a leak.

The City of Camarillo's Water Conservation Ordinance remains in effect. Remember that outdoor irrigation is allowed on Monday, Wednesday, Friday, and Sunday. Watering must be done before 8 a.m. or after 6 p.m. on those days. Exceptions for new landscape may be granted by calling (805) 388-5373. For more Water Wise Gardening ideas, visit our Web page at <http://www.camarillogardening.com>.

## Substances That Could Be in 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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) 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. 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.

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 can 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;

**Organic Chemical Contaminants**, including synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production and that can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

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

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

## Important Health Information

The Metropolitan Water District treats their water by adding fluoride to the naturally occurring level to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.7-1.3 ppm, as required by Department of Public Health regulations. Information about fluoridation, oral health, and current issues is available from [www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx](http://www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx).

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 from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/hotline>.

## 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 will in most cases 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 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 or call the U.S. EPA's Radon Hotline at (800) SOS-RADON.

## Source Water Assessment

In May 2001, a Source Water Vulnerability Assessment was conducted of the City of Camarillo's three groundwater wells in existence at that time. A fourth well located at the Camarillo Airport was added to our water system after this assessment was conducted. The sources have been determined to be vulnerable to contaminants associated with agricultural drainage and irrigation wells, with discharges permitted by the National Pollutant Discharge Elimination System, with storm drains and sewer collection systems, and with gas stations and dry cleaners. Although no contaminants from these activities were detected in the water produced by these wells, they are still considered vulnerable to these nearby activities. A copy of the complete assessment is available by contacting the City of Camarillo Water Division at (805) 388-5373.

## Lead in Home Plumbing

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. We are responsible for providing high-quality drinking water, but we 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Debbie Schultz, Administrative Specialist, at (805) 388-5373.

## Sampling Results

During the past year, we have taken hundreds of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic, or synthetic organic contaminants. The state requires us to monitor for certain substances less often than once per year because concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken. The tables below show only those contaminants that were detected in the water.

We participated in the 3rd stage of the EPA's Unregulated Contaminant Monitoring Regulation (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, in order to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Any UCMR3 detections are shown in the data tables in this report. Contact us for more information on this program.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	Produced Water from City of Camarillo Wells		Purchased Water from Calleguas Municipal Water District				VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	Jensen Plant 97%		District Lake Bard 3%			
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppm)	2013	1	0.6	NA	NA	0.10	0.07–0.11	NA	NA	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ppb)	2013	10	0.004	NA	NA	NA	NA	ND	ND–3	No	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Bromate (ppb)	2013	10	0.1	NA	NA	7.6 <sup>1</sup>	3.9–13 <sup>1</sup>	NA	NA	No	By-product of drinking water disinfection
Chlorine (ppm)	2013	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	1.4	0.3–2.2	Calleguas system-wide result Amount Detected: 2.2, Range (low-high): 1.6–2.6				No	Drinking water disinfectant added for treatment
Chromium (ppb)	2011, 2012, 2013	50	(100)	ND	ND–15	NA	NA	NA	NA	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Combined Radium (pCi/L)	2007, 2008, 2010, 2011	5	(0)	ND	ND–1.79	NA	NA	NA	NA	No	Erosion of natural deposits
Fluoride (ppm)	2011, 2012, 2013	2.0	1	0.2	ND–0.5	Calleguas system-wide result Amount Detected: 0.8 <sup>2,3</sup> , Range (low-high): 0.7–1.0 <sup>2,3</sup>				No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2007, 2009, 2011	15	(0)	7.1	ND–20.4	NA	NA	NA	NA	No	Erosion of natural deposits
Gross Beta Particle Activity (pCi/L)	2013	50	(0)	NA	NA	ND	ND–4	NA	NA	No	Decay of natural and man-made deposits
Haloacetic Acids–Stage 2 (ppb)	2013	60	NA	4.8	ND–11	Calleguas system-wide result Amount Detected: 4.3 <sup>4</sup> , Range (low-high): ND–12.0 <sup>4</sup>				No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2013	45	45	NA	NA	2.2	2.2–2.2	NA	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	2013	50	30	NA	NA	NA	NA	5	ND–5	No	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
TTHMs [Total Trihalomethanes]–Stage 2 (ppb)	2013	80	NA	28.7	9–41.3	Calleguas system-wide result Amount Detected: 22.5, Range (low-high): 14.6–38.2				No	By-product of drinking water disinfection
Turbidity (NTU)	2013	TT	NA	NA	NA	0.1 <sup>5</sup>	0–0.1 <sup>5</sup>	0.1 <sup>5</sup>	0–0.1 <sup>5</sup>	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2013	TT=95% of samples <0.3 NTU	NA	NA	NA	100%	NA	100	NA	No	Soil runoff
Uranium (pCi/L)	2007, 2009, 2011	20	0.43	3.3	ND–7.5	1 <sup>2</sup>	ND–2 <sup>2</sup>	2 <sup>2</sup>	1–2 <sup>2</sup>	No	Erosion of natural deposits

### Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2013	1.3	0.3	0.42	0/38	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2013	15	0.2	2.7	0/38	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

## SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	Produced Water from City of Camarillo Wells		Purchased Water from Calleguas Municipal Water District Jensen Plant 97%		Purchased Water from Calleguas Municipal Water District Lake Bard 3%		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
Aluminum (ppb)	2013	200	NS	NA	NA	100	67-110	NA	NA	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2011, 2012, 2013	500	NS	124	76-162	76 <sup>2</sup>	75-77 <sup>2</sup>	91 <sup>2</sup>	87-95 <sup>2</sup>	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2011, 2012, 2013	15	NS	5	ND-8	2 <sup>2</sup>	1-2 <sup>2</sup>	ND <sup>2</sup>	NA	No	Naturally occurring organic materials
Iron (ppb)	2013	300	NS	169 <sup>6</sup>	ND-360 <sup>6</sup>	NA	NA	NA	NA	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2013	50	NS	53 <sup>7</sup>	30-100 <sup>7</sup>	NA	NA	NA	NA	No	Leaching from natural deposits
Odor-Threshold (Units)	2013	3	NS	NA	NA	3	3-3	2.6	ND-8	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2011, 2012, 2013	1,600	NS	1,650 <sup>7</sup>	1,160-2,320 <sup>7</sup>	530 <sup>2</sup>	520-540 <sup>2</sup>	611 <sup>2</sup>	582-665 <sup>2</sup>	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2013	500	NS	275 <sup>6</sup>	214-450 <sup>6</sup>	48	44-51	66	65-67	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2013	1,000	NS	757 <sup>6</sup>	610-940 <sup>6</sup>	290	280-300	317	280-340	No	Runoff/leaching from natural deposits
Turbidity (NTU)	2011, 2012, 2013	5	NS	1.7	1.0-2.1	ND <sup>2</sup>	ND-0.1 <sup>2</sup>	ND <sup>2</sup>	ND-0.11 <sup>2</sup>	No	Soil runoff

## UNREGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Produced Water from City of Camarillo Wells		Purchased Water from Calleguas Municipal Water District Jensen Plant 97%		Purchased Water from Calleguas Municipal Water District Lake Bard 3%	
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Alkalinity (ppm)	2009, 2011, 2013	213	160-260	84 <sup>2</sup>	77-93 <sup>2</sup>	100 <sup>2</sup>	90-110 <sup>2</sup>
Bicarbonate (ppm)	2011, 2012, 2013	250	200-320	NA	NA	NA	NA
Boron (ppm)	2011, 2012, 2013	0.48	0.30-0.70	0.16 <sup>2</sup>	0.16-0.16 <sup>2</sup>	0.20 <sup>2</sup>	0.20-0.20 <sup>2</sup>
Calcium (ppm)	2011, 2012, 2013	157	86-263	24 <sup>2</sup>	22-26 <sup>2</sup>	29 <sup>2</sup>	27-31 <sup>2</sup>
Chlorate (ppb)	2013	64	35-120	25	25-25	NA	NA
Corrosivity <sup>8</sup> (Units)	2011, 2012, 2013	12.4	11.8-13	12 <sup>2</sup>	12-12 <sup>2</sup>	12.2 <sup>2</sup>	12.2-12.2 <sup>2</sup>
Hardness (Total Hardness) (ppm)	2011, 2012, 2013	513	100-957	110 <sup>2</sup>	110-120 <sup>2</sup>	132 <sup>2</sup>	125-139 <sup>2</sup>
Magnesium (ppm)	2011, 2012, 2013	43	25-73	12 <sup>2</sup>	12-12 <sup>2</sup>	15 <sup>2</sup>	14-15 <sup>2</sup>
Molybdenum (ppb)	2013	11	2.6-16	NA	NA	NA	NA
N-Nitrosodimethylamine (NDMA) (ppt)	2013	NA	NA	3	ND-5	NA	NA
pH (Units)	2011, 2012, 2013	7.4	7.1-8	8.3 <sup>2</sup>	8.2-8.4 <sup>2</sup>	8.3 <sup>2</sup>	8.2-8.4 <sup>2</sup>
Potassium (ppm)	2011, 2012, 2013	6	4-7	3 <sup>2</sup>	3-3 <sup>2</sup>	3 <sup>2</sup>	3-3 <sup>2</sup>
Sodium (ppm)	2011, 2012, 2013	151	106-208	58 <sup>2</sup>	57-60 <sup>2</sup>	71 <sup>2</sup>	70-71 <sup>2</sup>
Strontium (ppb)	2013	673	260-1,000	NA	NA	NA	NA
Total Organic Carbon (ppm)	2005	1.1	1-1.2	1.9 <sup>2</sup>	1.8-2.0 <sup>2</sup>	2.9 <sup>2</sup>	2.1-4.2 <sup>2</sup>
Vanadium (ppb)	2013	ND	ND-3.6	3.2	3.2-3.2	ND	NA

<sup>1</sup> Compliance for treatment plants that use ozone is based on a running annual average of monthly samples.

<sup>2</sup> Sampled in 2013.

<sup>3</sup> The Metropolitan Water District treats their water by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.7 - 1.3 ppm, as required by Department of Public Health regulations.

<sup>4</sup> Compliance was based on the Locational Running Annual Average of data collected at distribution-system-wide monitoring locations. The range of all samples collected is included.

<sup>5</sup> The turbidity level of the filtered water shall be less than or equal to 0.3 in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time.

<sup>6</sup> Results shown are from groundwater blended with Calleguas water, bringing it into compliance. Raw groundwater samples alone were detected at a level exceeding the established State Secondary MCL (SMCL), which was set to protect against unpleasant aesthetic effects such as taste, odor, and staining of fixtures and clothing during laundering.

<sup>7</sup> Detections are at a level exceeding the established State Secondary MCL (SMCL), which is set to protect against unpleasant aesthetic effects such as taste, odor, and staining of fixtures and clothing during laundering. The City of Camarillo is embarking on the construction of a regional water treatment plant to improve the quality of the water pumped from the Fox Canyon Aquifer.

<sup>8</sup> Measures the aggressiveness of water transported through pipes. Water with <10.0 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. Water measuring >12.0 indicates non-aggressive water, and between 10.0 and 11.9 indicates moderately aggressive water.

## Definitions

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

**μS/cm (microsiemens per centimeter):** A unit expressing the amount of electrical conductivity of a solution.

**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. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

**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 U.S. EPA.

**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 the use of disinfectants to control microbial contaminants.

**NA:** Not applicable

**ND (Not detected):** Indicates that the substance

was not found by laboratory analysis.

**NS:** No standard

**NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**pCi/L (picocuries per liter):** A measure of radioactivity.

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

**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 EPA.

**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).

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

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