

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

*Reporting Year 2013*



*Presented By*  
**Calaveras County**  
**Water District**

PWS ID#: 0510005

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

## We Are Serious About Services

We are again proud to present our Annual Water Quality Report, which is a summary of the hundreds of tests we do throughout the year to ensure the drinking water quality provided to you not only meets the state and federal standards, but that it also tastes good. We continuously seek to improve our water quality by refining our processes, and during the next several years we will be improving our delivery systems through an extensive program to replace older pipes and storage tanks. Leaks in the system not only lose water but also may cause serious damage to streets and roads. During this drought, we remain vigilant to meeting the high standards for safe and reliable drinking water, but we are also striving to reduce our costs by responding to leaks or prevent them by addressing the backlog of infrastructure needs in our system. Check our Web site [www.ccwd.org](http://www.ccwd.org) for updates on our progress.

## Where Does My Water Come From?

Calaveras County Water District customers are fortunate because they enjoy an abundant water supply from four sources. CCWD has rights to the water on the three major rivers that flow through our county: Calaveras, Mokelumne, and Stanislaus. Five of our water systems draw from one of these surface water sources. The source for our Copper Cove system is the Stanislaus River at Lake Tulloch. The source for the Ebbetts Pass system is the Stanislaus River at McKay's Reservoir. The source for our Jenny Lind system is the Calaveras River below Hogan Dam. The source for our Sheep Ranch System is San Antonio Creek below White Pines Reservoir, a tributary to the Calaveras River. The source for our West Point system is the Bear Creek tributary to the Middle Fork of the Mokelumne River. Our sixth water system in Wallace draws water from two groundwater wells.

All three river watersheds have been surveyed for potential contaminants and the watersheds were determined to be pristine. No man-made organic constituents have ever been detected. These survey reports are available for viewing at the district office in San Andreas. To learn more about our watershed on the Internet, go to U.S. EPA's Surf Your Watershed at [www.epa.gov/surf](http://www.epa.gov/surf).

## 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, which are by-products of industrial processes and petroleum production, and which 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.

## 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 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).

## Important Health Information

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>.

## Community Participation

You are invited to attend and become involved with our water district. Our Board of Directors meet the second Wednesday of each month at 9:00 am in the CCWD Headquarters, 120 Toma Ct., San Andreas. We also are your source of information on water conservation and seek your involvement by reporting leaking or other water issues you see in your neighborhoods. Please visit us on the Web at [www.ccwd.org](http://www.ccwd.org) or call us at (209) 754-3543. You can now follow us on Facebook too!

## Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available at our office. This plan is an assessment of the delineated area around our listed sources through which contaminants, if present, could migrate and reach our source water. The Source Water Assessment Plan for our water system had a rating of “medium.” If you would like to review the Source Water Assessment Plan, please feel free to contact our office at (209) 754-3543.

## QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Teresa Tanaka, Regulatory Programs Manager, at (209) 754-3306.

## Sampling Results

Over the past year we have taken many water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The tables show only those contaminants that were detected in the treated water. The state requires us to monitor for certain substances less often than once per year because the 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.

### REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	PHG (MCLG) (MRDLG)	Calaveras County Water District		Copper Cove		Ebbetts Pass		Jenny Lind		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
<b>Bromate</b> (ppb)	2013	10	0.1	NA	NA	0.0015	ND-0.0015	ND	NA	ND	NA	No	By-product of drinking water disinfection
<b>Chlorine</b> (ppm)	2013	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	NA	NA	1.26	1.13-1.29	1.22	1.00-1.42	1.87	1.43-2.20	No	Drinking water disinfectant added for treatment
<b>Control of DBP precursors [TOC]</b> (Units)	2013	TT	NA	NA	NA	1.07	0.87-1.34	1.25	1.10-1.40	2.02	1.70-2.40	No	Various natural and man-made sources
<b>Control of DBP precursors [TOC]</b> (grains/gal)	2013	TT	NA	NA	NA	NA	NA	NA	NA	NA	NA	No	Various natural and man-made sources
<b><i>E. coli</i> [at the groundwater source]</b> (# positive samples)	2013	NA	0	NA	NA	NA	NA	NA	NA	NA	NA	No	Human and animal fecal waste in untreated groundwater
<b>Fluoride</b> (ppm)	2013	2.0	1	NA	NA	0.10	NA	<0.10	NA	0.13	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Haloacetic Acids-Stage 1</b> (ppb)	2013	60	NA	NA	NA	23	15-48	35.7	22-40	37.50	17-48	No	By-product of drinking water disinfection
<b>Nitrate [as nitrate]</b> (ppm)	2013	45	45	NA	NA	0.38	NA	<0.050	NA	<0.050	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<b>TTHMs [Total Trihalomethanes]-Stage 1</b> (ppb)	2013	80	NA	NA	NA	26	12-38	33.1	21-51	44.6	19-64	No	By-product of drinking water disinfection
<b>Turbidity'</b> (NTU)	2013	TT	NA	NA	NA	0.071	0.025-0.071	0.10	0.06-0.10	0.122	0.24-0.122	No	Soil runoff
<b>Turbidity</b> (Lowest monthly percent of samples meeting limit)	2013	TT	NA	NA	NA	100	NA	100	NA	100	NA	No	Soil runoff



**REGULATED SUBSTANCES**

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL (MRDL)	PHG (MCLG) (MRDLG)	Sheep Ranch		West Point-Bear Creek		Wallace		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH		
<b>Bromate</b> (ppb)	2013	10	0.1	NA	NA	ND	NA	NA	NA	No	By-product of drinking water disinfection
<b>Chlorine</b> (ppm)	2013	[4.0 (as Cl <sub>2</sub> )]	[4 (as Cl <sub>2</sub> )]	0.92	0.92–1.30	1.30	1.03–1.57	0.79	0.24–1.10	No	Drinking water disinfectant added for treatment
<b>Control of DBP precursors [TOC]</b> (Units)	2013	TT	NA	NA	NA	0.93	0.60–1.2	NA	NA	No	Various natural and man-made sources
<b>Control of DBP precursors [TOC]</b> (grains/gal)	2013	TT	NA	0.67	0.45–0.95	NA	NA	NA	NA	No	Various natural and man-made sources
<b>E. coli [at the groundwater source]</b> (# positive samples)	2013	NA	0	NA	NA	NA	NA	0	NA	No	Human and animal fecal waste in untreated groundwater
<b>Fluoride</b> (ppm)	2013	2.0	1	<0.10	NA	0.11	NA	NA	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
<b>Haloacetic Acids–Stage 1</b> (ppb)	2013	60	NA	24	NA	20.3	16–21	ND	NA	No	By-product of drinking water disinfection
<b>Nitrate [as nitrate]</b> (ppm)	2013	45	45	ND	NA	<0.22	NA	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
<b>TTHMs [Total Trihalomethanes]–Stage 1</b> (ppb)	2013	80	NA	30	NA	30.3	25–36	2.3	NA	No	By-product of drinking water disinfection
<b>Turbidity<sup>1</sup></b> (NTU)	2013	TT	NA	0.13	0.08–0.13	0.07	0.04–0.07	0.67	0.25–0.67	No	Soil runoff
<b>Turbidity</b> (Lowest monthly percent of samples meeting limit)	2013	TT	NA	100	NA	100	NA	NA	NA	No	Soil runoff

**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)	Copper Cove		Ebbetts Pass		Jenny Lind		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES		
<b>Copper</b> (ppm)	2012	1.3	0.3	0.21	0/30	0.21	0/30	0.7	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Lead</b> (ppb)	2012	15	0.2	7.4	0/30	7.4	1/30	ND	0/30	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; 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)	Sheep Ranch		West Point-Bear Creek		Wallace		VIOLATION	TYPICAL SOURCE
				AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES		
<b>Copper</b> (ppm)	2012	1.3	0.3	ND	0/5	0.44	0/10	0.26 <sup>2</sup>	0/5 <sup>2</sup>	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
<b>Lead</b> (ppb)	2012	15	0.2	ND	0/5	ND	0/10	7.1 <sup>2</sup>	0/5 <sup>2</sup>	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES															
			Copper Cove			Ebbetts Pass		Jenny Lind							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE				
Chloride (ppm)	2013	500	NS	2.7	NA	2.8	NA	7.7	NA	No	Runoff/leaching from natural deposits; seawater influence				
Color (Units)	2013	15	NS	<3	<3-4	3.0	<3-3	<3	<3-17	No	Naturally-occurring organic materials				
Corrosivity (Units)	2013	Noncorrosive	NS	-2.22	NA	-3.21	NA	-1.3	NA	No	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors				
Iron (ppb)	2013	300	NS	ND	NA	ND	NA	ND	NA	No	Leaching from natural deposits; industrial wastes				
Manganese (ppb)	2013	50	NS	ND	NA	ND	NA	10.6	<5-18	No	Leaching from natural deposits				
Odor-Threshold (Units)	2013	3	NS	1.0	1.0-1.0	1.0	1.0-1.0	1.0	1.0-1.0	No	Naturally-occurring organic materials				
Specific Conductance (µS/cm)	2013	1,600	NS	64.9	NA	36.6	NA	191	NA	No	Substances that form ions when in water; seawater influence				
Sulfate (ppm)	2013	500	NS	1.8	NA	0.59	NA	11	NA	No	Runoff/leaching from natural deposits; industrial wastes				
Total Dissolved Solids (ppm)	2013	1,000	NS	62	NA	28	NA	99	NA	No	Runoff/leaching from natural deposits				
Zinc (ppm)	2013	5.0	NS	ND	NA	0.22	NA	ND	NA	No	Runoff/leaching from natural deposits; industrial wastes				

SECONDARY SUBSTANCES															
			Sheep Ranch			West Point-Bear Creek		Wallace							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE				
Chloride (ppm)	2013	500	NS	4.5	NA	2.23	1.0-4.4	0.56	0.16-1.73	No	Runoff/leaching from natural deposits; seawater influence				
Color (Units)	2013	15	NS	3	<3-7	<3	<3-<3	4.6	<3-12	No	Naturally-occurring organic materials				
Corrosivity (Units)	2013	Noncorrosive	NS	-2.29	NA	-1.83	NA	NA	NA	No	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors				
Iron (ppb)	2013	300	NS	ND	NA	ND	NA	115.5	27-470	No	Leaching from natural deposits; industrial wastes				
Manganese (ppb)	2013	50	NS	ND	NA	ND	NA	25	6.7-52	No	Leaching from natural deposits				
Odor-Threshold (Units)	2013	3	NS	1.0	1.0-1.0	1.0	1.0-1.0	1.0	1.0-1.0	No	Naturally-occurring organic materials				
Specific Conductance (µS/cm)	2013	1,600	NS	66.6	NA	60.33	53.4-71.6	NA	NA	No	Substances that form ions when in water; seawater influence				
Sulfate (ppm)	2013	500	NS	1.2	NA	0.65	0.56-0.79	20	NA	No	Runoff/leaching from natural deposits; industrial wastes				
Total Dissolved Solids (ppm)	2013	1,000	NS	63	NA	53.33	41-70	NA	NA	No	Runoff/leaching from natural deposits				
Zinc (ppm)	2013	5.0	NS	0.071	NA	ND	NA	NA	NA	No	Runoff/leaching from natural deposits; industrial wastes				

UNREGULATED AND OTHER SUBSTANCES														
		Copper Cove		Ebbetts Pass		Jenny Lind		Sheep Ranch		West Point-Bear Creek		Wallace		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromochloromethane (ppb)	2013	NA	NA	0.97	0.69-1.30	5.44	3.9-7.6	NA	NA	1.85	1.2-2.4	NA	NA	By-product of drinking water disinfection
Bromodichloromethane (ppb)	2013	1.5	1.3-1.9	NA	NA	NA	NA	2.9	NA	NA	NA	0.760	NA	By product of drinking water disinfection
Chloroform (ppb)	2013	23	22-25	30	20-50	32.85	14-57	27	NA	24.75	19-34	0.800	NA	By product of drinking water disinfection
Hardness (ppm)	2013	23	NA	19	NA	81	NA	31	NA	21.66	19-23	84	NA	Hardness in drinking water is caused by two naturally occurring substances: calcium and magnesium
Magnesium (ppm)	2013	1.7	NA	0.61	NA	7.1	NA	1.6	NA	1.8	NA	10	NA	Naturally occurring
Sodium (ppm)	2013	3.6	NA	3.2	NA	7.7	NA	4.8	NA	4.2	2.9-5.9	NA	NA	Sodium refers to the naturally occurring salt present in the water

<sup>1</sup>Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

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

## 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.

**grains/gal (grains per gallon):** Grains of compound per gallon of water.

**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.

**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).

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