



ANNUAL
WATER
QUALITY
REPORT

Water testing performed in 2005

Proudly Presented By:
CALAVERAS COUNTY
WATER DISTRICT



PWS ID#: CA0510005

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

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 can 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) 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.

Where Does My Water Come From?

Calaveras County Water District customers are fortunate because they enjoy an abundant water supply from three sources. CCWD has rights to the water on the three major rivers that flow through our county—Calaveras, Mokelumne and Stanislaus. Our five 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.

All three river watersheds have been surveyed for potential contaminants and the watersheds were determined to be "pristine." No manmade 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.

Continuing Our Commitment

Once again we proudly present our annual water quality report. This edition covers all testing completed from January through December 2005. We are pleased to tell you that 4 of our 5 systems complied with all state and federal drinking water laws remains exemplary. During 2005, our Jenny Lind system was noncompliant with only one parameter, haloacetic acids;

however, by April 1, 2006, that system was brought into compliance. 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 of our water users.



For more information about this report, or for any questions relating to your drinking water, please call Fred Burnett, Regulatory Compliance, at (209) 754-3543, ext. 35.

Community Participation

You are invited to participate in our public forum and voice your concerns about your drinking water. We meet the second Wednesday of each month beginning at 9 a.m. at the Calaveras County Water District (CCWD) Board Room, 423 East St. Charles Street, San Andreas, CA. You may also visit the CCWD on the Internet at www.ccwd.org, or contact CCWD staff directly by phone at (209) 754-3543.

About Our Violation

The Jenny Lind system violated the MCL for haloacetic acids from January 2005 through March 2006. Disinfection by-products including trihalomethanes (THMs) and haloacetic acids (HAAs) occur naturally in drinking water as a result of chlorine disinfection of surface water. Some people who drink water containing HAAs in excess of the MCL over many years may have an increased risk of getting cancer.

Substances That Might Be in Drinking 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. EPA and the State Department of Health Services (Department) prescribe regulations that limit the amount of certain substances in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water, which 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 substances. The presence of contaminants does not necessarily indicate that water poses a health risk.

Substances 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 can 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 which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, which 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.

Summary of Source Water Assessments

An assessment of the drinking water sources for all CCWD water systems was completed in 2002-2003. The sources are considered most vulnerable to the following activities:

• Gas stations (present and historic)	JL, CC, EP, SR, WP
• Chemical/petroleum processing/storage	JL, CC, SR
• Dry cleaners	JL, CC, EP
• Metal plating/finishing/fabrication	JL, CC
• Airports—maintenance/fueling areas	JL, CC
• Septic tanks—high density (>1/acre)	JL, CC, SR
• Septic tanks—low density (<1/acre)	WP
• Wastewater treatment plants	JL, CC, SR
• Managed forests	JL, CC, WP
• Historic dumps/landfills and mining operation	JL, CC, SR, WP
• Automotive repair/body shops/machine shops	SR
• Recreation area—(off-road vehicle trails)	SR, WP
• Grazing (>5 large animals or equivalent per acre)	SR
• Sewer collection systems	SR
• Managed and clearcut harvested forests (<30 years)	SR
• NPDES/WDR permitted discharges (high turbidity, microbiological contaminants and chemicals in the permitted discharges)	SR
• Recent (<10 years) burn areas	SR, WP

KEY

JL: Jenny Lind
 CC: Copper Cove
 EP: Ebbetts Pass
 SR: Sheep Ranch
 WP: West Point

A copy of the complete assessment of each system may be viewed at the Department of Health Services Water Field Operations Branch, Stockton District Office, 31 E. Channel Street, Room 270, Stockton, California 95202. You may also request that a summary of the assessment be sent to you by contacting Mr. Joseph O. Spano, District Engineer, at (209) 948-7696.

Table Definitions

AL (Action Level): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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. Secondary MCLs (SMCL)

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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U.S. EPA.

NA: Not applicable

ND: Not detected

NS: No standard

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

PDWS (Primary Drinking Water Standard): MCLs 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.

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

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.

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

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 table below shows only those contaminants that were detected in the water. The state requires us to monitor for certain substances less 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.

PRIMARY DRINKING WATER STANDARD (Regulated In Order to Protect Against Possible Adverse Health Effects)

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	Copper Cove		Ebbetts Pass		Jenny Lind		Sheep Ranch		West Point - Bear Creek		VIOLATION	TYPICAL SOURCE
				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		
Aluminum (ppb)	2005	1,000	600	69	NA	50	NA	57	NA	38	NA	48	NA	No	Erosion of natural deposits; residue from some surface water treatment processes
Chlorine (ppm)	2005	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.66	0.92-2.85	1.26	0.99-1.4	1.79	1.06-2.85	1.2	0.92-1.4	1.47	0.8-1.97	No	Drinking water disinfectant added for treatment
Control of DBP precursors (TOC) (ppm)	2005	TT	NA	1.7	1.2-2.7	1.44	1-2.2	2.6	2.27-3.1	0.88	0.5-1.6	1.09	0.6-1.3	No	Various natural and manmade sources
Gross Alpha Particle Activity (pCi/L)	2003	15	(0)	ND	NA	ND	NA	1.2	NA	ND	NA	ND	NA	No	Erosion of natural deposits
Haloacetic Acids (ppb)	2005	60	NA	52.2	20-120	30.4	19-42	76.9	35-120	20	NA	25	20-27	Yes ¹	By-product of drinking water disinfection
Nitrate (as nitrate, NO ₃) (ppm)	2005	45	45	1.2	NA	ND	NA	1.3	NA	ND	NA	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (ppb)	2005	80	NA	41.5	13-92	32.6	15-49	61.0	37-89	22	NA	24.3	22-28	No	By-product of drinking water chlorination
Turbidity (NTU) ²	2005	TT	NA	0.19	0.03-0.19	0.17	0.06-0.17	0.18	0.02-0.18	0.12	0.05-0.12	0.19	0.03-0.19	No	Soil runoff

Tap water samples were collected for lead and copper analyses from homes throughout the service areas

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				Copper Cove		Ebbetts Pass		Jenny Lind		Sheep Ranch		West Point - Bear Creek			
SUBSTANCE (UNITS)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES	AMOUNT DETECTED (90th%TILE)	HOMES ABOVE AL/ TOTAL HOMES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2005 ³	1.3	0.17	0.6	0/10	0.12	0/21	0.6	0/20	ND	0/5	0.2	0/10	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2005 ³	15	2	ND	0/10	ND	0/21	3.7	0/20	ND	0/5	ND	0/10	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY DRINKING WATER STANDARD (Regulated In Order to Protect the Odor, Taste and Appearance of Drinking Water)

SECONDARY DRINKING WATER STANDARD (Regulated In Order to Protect the Odor, Taste and Appearance of Drinking Water)															
				Copper Cove		Ebbetts Pass		Jenny Lind		Sheep Ranch		West Point - Bear Creek			
SUBSTANCE (UNITS)	YEAR SAMPLED	SMCL	PHG (MCLG)	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	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2005	500	NS	8.9	NA	2.8	NA	10	NA	4.3	NA	1.3	NA	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2005	15	NS	ND	ND-7	ND	ND-7	ND	ND-5	ND	NA	ND	ND-7	No	Naturally-occurring organic materials
Corrosivity (Units)	2005	Non-corrosive	NS	-1.43	NA	-2.75	NA	-0.93	NA	-2.46	NA	-2.39	NA	No	Natural or industrially-influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Manganese (ppb)	2005	50	NS	ND	NA	ND	NA	ND	ND-40	ND	NA	ND	NA	No	Leaching from natural deposits
Specific Conductance (µmhos/cm)	2005	1,600	NS	194	NA	35	NA	203	NA	56	NA	49	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2005	500	NS	9.1	NA	0.5	NA	14	NA	0.84	NA	ND	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids [TDS] (ppm)	2005	1,000	NS	177	NA	20	NA	148	NA	ND	NA	73	NA	No	Runoff/leaching from natural deposits
Zinc (ppb)	2005	5,000	NS	100	NA	70	NA	60	NA	50	NA	110	NA	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED AND OTHER SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	Copper Cove		Ebbets Pass		Jenny Lind		Sheep Ranch		West Point - Bear Creek		TYPICAL SOURCE
		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	
Bromodichloromethane (ppb)	2005	2.9	1.3-6.6	1.1	0.7-1.7	7.0	6.0-9.5	2.5	NA	1.7	1.3-2.3	By-product of drinking water disinfection
Calcium (ppm)	2005	11	NA	3.2	NA	17	NA	4.3	NA	3.5	NA	Naturally occurring
Chloroform (ppb)	2005	31.5	7.2-86	32	14.0-59.0	53.4	30.0-79.0	19	NA	22.8	21-26	By-product of drinking water disinfection
Dibromochloromethane (ppb)	2005	0.08	ND-0.8	ND	NA	0.6	ND-1.2	ND	NA	ND	NA	By-product of drinking water disinfection
Hardness (ppm)	2005	75	NA	12	NA	73	NA	17	NA	16	NA	Hardness in drinking water is caused by two chemicals, calcium and magnesium
Magnesium (ppm)	2005	12	NA	ND	NA	7.4	NA	ND	NA	ND	NA	Naturally occurring
Sodium (ppm)	2005	8.4	NA	2.64	NA	9.2	NA	4	NA	3.1	NA	Sodium is an abundant and widespread constituent of many soils and rocks

Footnotes: _____

¹ The MCL violation occurred only in the Jenny Lind system.

² Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system. During the reporting year, 100% of all samples taken to measure turbidity met water quality standards.

³ Samples were taken in 2003 for Copper Cove and Jenny Lind and in 2004 for Ebbets Pass and Sheep Ranch.