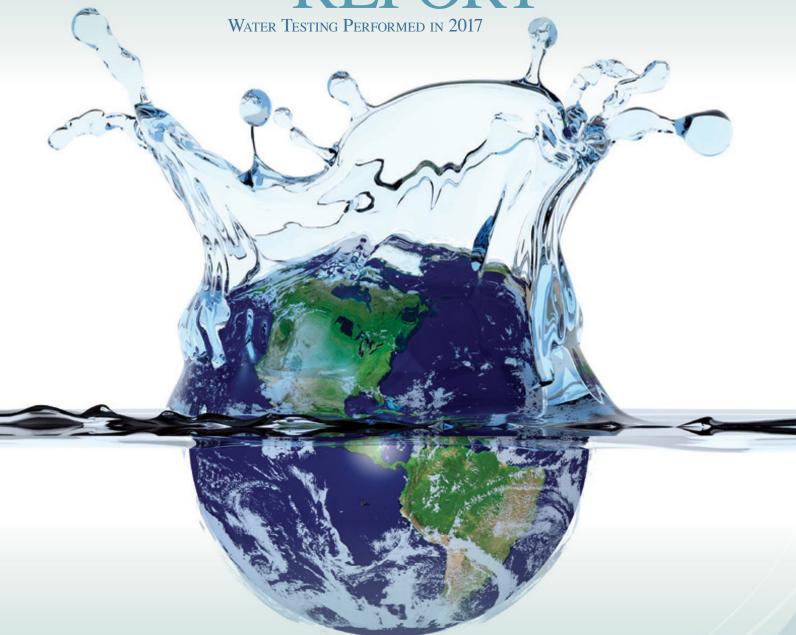
ANNUAL WATER OUALITY REPORT





Presented By
Calaveras County
Water District

Quality First

once again we are pleased to present our annual water quality report. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all of our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, wellinformed customers are our best allies.

Community Participation

We'd like to invite you to get involved with our water district. Our Board of Directors meets the second Wednesday of each month, at 9 a.m., at the CCWD Headquarters, 120 Toma Ct., San Andreas, and members of the public are welcome to attend. As Calaveras County emerges from an unprecedented drought, we continue to be your source of information for water efficiency guidelines. We appreciate your help in using water efficiently to meet local and state requirements and reporting any water waste that you see in your neighborhood. For more information about CCWD, visit us online at www.ccwd. org, "like" us on Facebook at www.facebook.com/ calaveraswaterdistrict, email customerservice@ ccwd.orgn or call (209) 754-3543.

Where Does My Water Come From?

alaveras County Water
District customers are
fortunate to 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 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 New 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 Bear Creek, a tributary to the Middle Fork of the Mokelumne River. Our sixth water system in Wallace draws water from two groundwater wells in the South San Joaquin Groundwater Basin.

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, go to the U.S. EPA's Surf Your Watershed at www.epa.gov/surf.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as those with cancer undergoing chemotherapy, those 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.

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 State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants

in bottled water that 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 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.

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.

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 do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.) 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/lead.

QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call Jesse Hampton, Plant Operations Manager, at (209) 754-3316, or visit www.ccwd.org.

Water treatment is a complex,

time-consuming process.

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring 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.

						Cop	per Cove	Ebbe	etts Pass	J	enny Lind		
SUBSTANCE (UNIT OF MEASURE)			YEAR MPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)		2	2017	1	2	0.013	NA	0.0089	NA	0.018	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)		2	2017	10	0.1	1.23	ND-2.8	NA	NA	ND	NA	No	By-product of drinking water disinfection
Chlorine (ppm)		2	2017	[4.0 (as Cl2)]	[4 (as Cl2)]	1.65	1.17–2.02	1.22	0.81–1.68	1.91	1.52–2.2	No	Drinking water disinfectant added for treatment
Control of DBP pred [TOC] (Units)	cursors	2	2017	TT	NA	1.7	1.3–2.0	1.50	1.3–1.7	2	1.7–2.6	No	Various natural and man-made sources
Cryptosporidium (Un	nits)	2	2017	Surface water treatment=TT	HPC=NA; Others = (0)	<0.1	NA	0.1	ND-0.1	0.125	ND-0.4	No	Naturally present in the environment
Fluoride (ppm)		2	2017	2.0	1	ND	NA	ND	NA	0.078	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (pp	b)	2	2017	60	NA	37.5	17–57	55	25–70	41	22–46	No	By-product of drinking water disinfection
Nitrate [as nitrate] (opm)	2	2017	45	45	0.7	NA	ND	NA	1.40	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] (p	pb)	2	2017	80	NA	51.5	42–67	63	28–92	44	18–52	No	By-product of drinking water disinfection
Turbidity ² (NTU)		2	2017	TT	NA	0.43	0.029-0.43	0.16	0.07-0.16	0.101	0.055-0.10)1 No	Soil runoff
Turbidity (Lowest mo		2	2017	ТТ	NA	100	NA	100	NA	100	NA	No	Soil runoff
Tap water samples were o	collected for le	ead and	copper a	nalyses from sampl	e sites throughout th	ne community.							
				Сорр	er Cove	Eb	betts Pass		Jenny Lind				
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/ TOTAL SITES	AMOUNT DETECTE (90TH%TIL	D ABOVE AL	/ DETE	OUNT S ECTED 1%TILE)	ITES ABOVE AL/TOTAL SITES	VIOLATION T	YPICAL SOURCE	
Copper (ppm)	2015	1.3	0.3	0.85	0/20	0.24³	0/30³	1	.03	0/30³			ion of household plumbing systems; ıral deposits; leaching from wood
Lead (ppb)	2015	15	0.2	ND	0/20	2.03	0/30³	3	5.53	0/30³		Internal corros discharges fron natural deposit	ion of household plumbing systems; n industrial manufacturers; erosion of

REGULATED SUBSTANCES											
				She	ep Ranch	West Poin	t-Bear Creek	Wallace Wat	ter Treatment Plant		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Barium (ppm)	2017	1	2	0.02	0.019–0.021	0.015	NA	NA	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Bromate (ppb)	2017	10	0.1	NA	NA	NA	NA	NA	NA	No	By-product of drinking water disinfection
Chlorine (ppm)	2017	[4.0 (as Cl2)]	[4 (as Cl2)]	1.2	0.87–1.75	1.23	1.06–2	0.99	0.87–1.09	No	Drinking water disinfectant added for treatment
Control of DBP precursors [TOC] (Units)	2017	ТТ	NA	0.92	0.71–1.2	1.37	ND-2.00	NA	NA	No	Various natural and man-made sources
Cryptosporidium (Units)	2017	Surface water treatment=TT	HPC=NA; Others = (0)	ND	NA	0.095	ND-0.1	NA	NA	No	Naturally present in the environment
Fluoride (ppm)	2017	2.0	1	ND	NA	ND	NA	NA	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (ppb)	2017	60	NA	35	NA	34	26–34	ND	NA	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2017	45	45	ND	NA	ND	NA	ND	NA	No	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs [Total Trihalomethanes] ¹ (ppb)	2017	80	NA	35	NA	41	33–41	2.6	NA	No	By-product of drinking water disinfection
Turbidity ² (NTU)	2017	TT	NA	0.31	0.06-0.31	0.07	0.06-0.07	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2017	ТТ	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.

				Sheep Ra	anch	West Point-B	Bear Creek	Wallace Water Tro	eatment Plant		
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	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	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2015	1.3	0.3	0.055	0/5	0.22	0/10	0.23	0/5	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2015	15	0.2	ND	0/5	5.9	0/10	ND	0/5	No	Internal corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES	SECONDARY SUBSTANCES												
	Copper Cove Ebbetts Pass Jenny Lind								ny 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)	2017	500	NS	4.0	NA	2.4	NA	3.2	NA	No	Runoff/leaching from natural deposits; seawater influence		
Color (Units)	2017	15	NS	1.08	ND-5	ND	NA	0.17	ND-0.83	No	Naturally occurring organic materials		
Corrosivity (Units)	2017	Non-corrosive	N	-0.89	NA	-2.6	NA	-0.48	NA	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors		
Iron (ppb)	2017	300	NS	ND	NA	240	NA	ND	NA	No	Leaching from natural deposits; industrial wastes		
Manganese (ppb)	2017	50	NS	29.5	21–38	3.6	NA	6.0	2.0-23	No	Leaching from natural deposits		
Specific Conductance (µS/cm)	2017	1,600	NS	92	NA	33	NA	180	NA	No	Substances that form ions when in water; seawater influence		
Sulfate (ppm)	2017	500	NS	3.4	NA	0.59	NA	19	NA	No	Runoff/leaching from natural deposits; industrial wastes		
Total Dissolved Solids (ppm)	2017	1,000	NS	64	NA	29	NA	140	NA	No	Runoff/leaching from natural deposits		
Zinc (ppm)	2017	5.0	NS	0.053	NA	0.16	NA	0.043	NA	No	Runoff/leaching from natural deposits; industrial wastes		

UNREGULATED A								
	Copper Cove		Cove	Ebbe	etts Pass	Jer	nny Lind	
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Chlorate (ppb)	2015	NA	NA	ND	NA	260	150-420	NA
Hardness (ppm)	2017	37	NA	8.2	NA	70	NA	Caused by two naturally occurring substances: calcium and magnesium
Magnesium (ppm)	2017	4.8	NA	0.60	NA	6.8	NA	Naturally occurring
Sodium (ppm)	2017	5.6	NA	3.8	NA	7.9	NA	Refers to the naturally occuring salt present in the water
Strontium (ppb)	2014	NA	NA	35.1	29–38	130 ⁶	110–1406	Decay of natrual and man-made deposits
Vanadium (ppb)	2015	NA	NA	ND ⁵	NA ⁵	0.62	0.41-0.81	NA

					Sheep Ranch		West Point-Bear Creek		Wallace Water Treatment Plant		
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)	2017	500	NS	3.9	3.6–4.2	3.6	NA	6.93	6.4–7.3³	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2017	15	NS	10	ND-10	ND	NA	1.8	ND-10	No	Naturally occurring organic materials
Corrosivity (Units)	2017	Non-corrosive	N	-1.75	-1.71.8	-1.6	NA	-1 ³	-113	No	Natural or industrially influenced balance of hydrogen, carbon, and oxygen in the water; affected by temperature and other factors
Iron (ppb)	2017	300	NS	24	ND-27	ND	NA	91.4	20-330	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2017	50	NS	2.05	ND-2.1	1.9	NA	26.4	9.7–55	No	Leaching from natural deposits
Specific Conductance (µS/cm)	2017	1,600	NS	60.5	59–62	66	NA	180³	NA ³	No	Substances that form ions when in water; seawate influence
Sulfate (ppm)	2017	500	NS	1.0	0.95–1.1	ND	NA	12³	11–13³	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2017	1,000	NS	47	45–49	44	NA	165³	160-170 ³	No	Runoff/leaching from natural deposits
Zinc (ppm)	2017	5.0	NS	0.071	0.056–0.085	0.14	NA	41³	20–62³	No	Runoff/leaching from natural deposits; industrial wastes

UNKEGULATED A	UNREGULATED AND OTHER SUBSTANCES*											
		Sheep Rai	nch	West Point-Be	ear Creek	Wallace Water [•]	Treatment Plant					
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE				
Chlorate (ppb)	2015	NA	NA	NA	NA	NA	NA	NA				
Hardness (ppm)	2017	17	17–17	21³	NA	42³	41–43³	Caused by two naturally occurring substances: calcium and magnesium				
Magnesium (ppm)	2017	1.4	1.4–1.4	NA	NA	4.73	4.6–4.7³	Naturally occurring				
Sodium (ppm)	2017	4.65	4.6–4.7	5.7	NA	19³	NA^3	Refers to the naturally occuring salt present in the water				
Strontium (ppb)	2014	NA	NA	NA	NA	NA	NA	Decay of natrual and man-made deposits				
Vanadium (ppb)	2015	NA	NA	NA	NA	NA	NA	NA				

- ¹ Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their livers, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
- ²Turbidity 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.
- ³ Sampled in 2016.
- Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.
- ⁵ Sampled in 2014.
- ⁶ Sampled in 2015.

Definitions

AL (**Regulatory Action Level**): The concentration of a contaminant that, 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.

LRAA (**Locational Running Annual Average**): The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters. Amount Detected values for TTHMs and HAAs are reported as the highest LRAAs.

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.