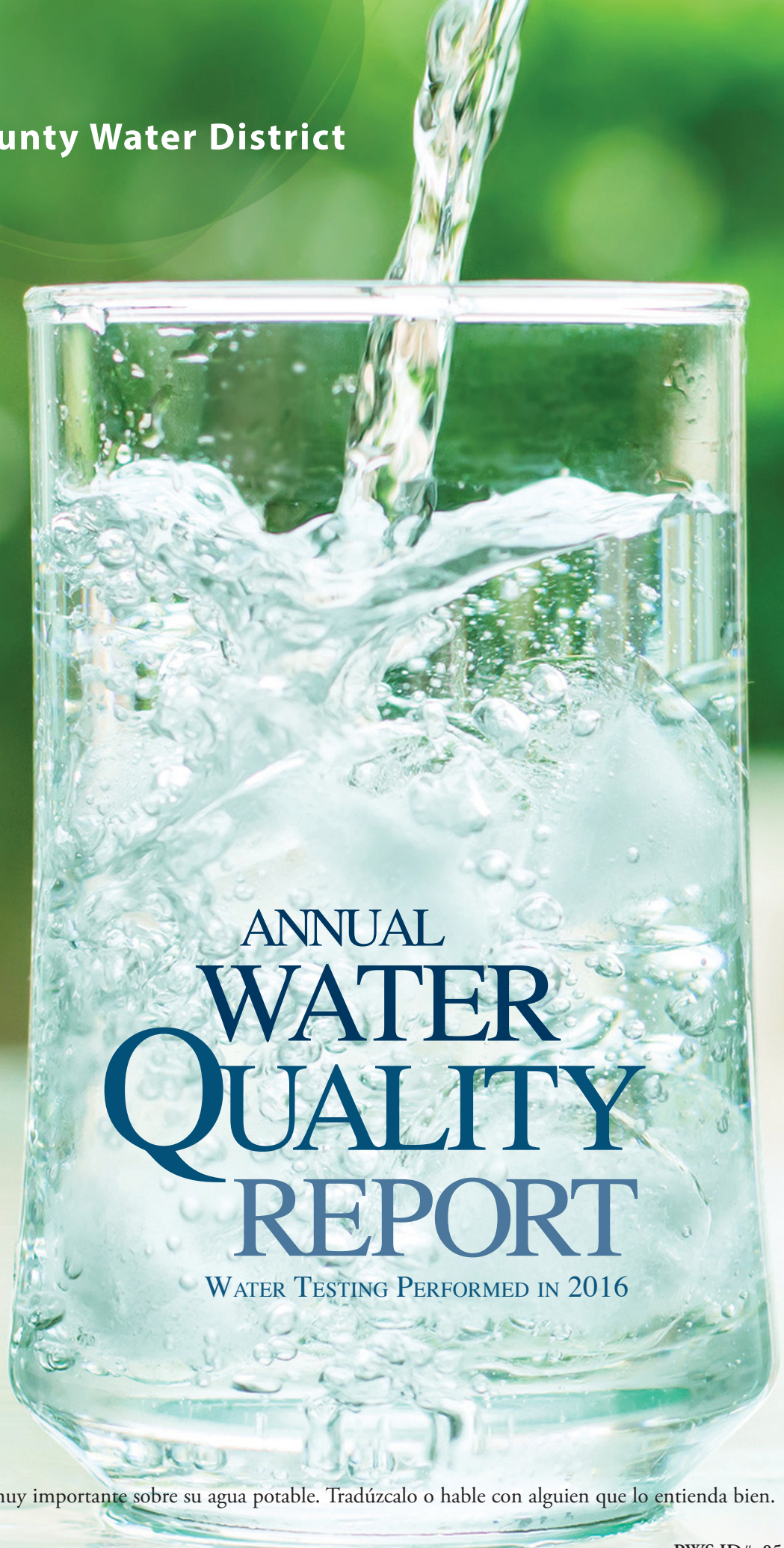
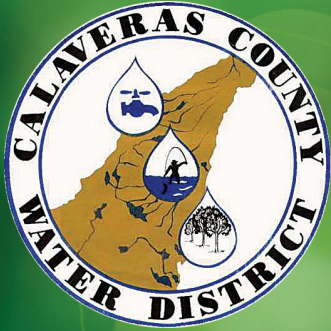


Presented By
Calaveras County Water District



ANNUAL
WATER
QUALITY
REPORT

WATER TESTING PERFORMED IN 2016

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

We've Come a Long Way

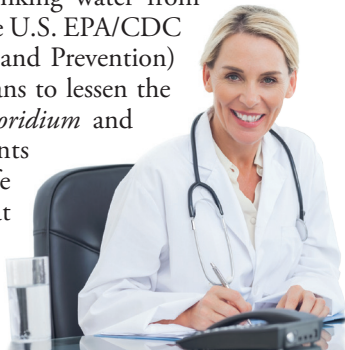
Once again we are proud to present our annual water quality report covering the period between January 1 and December 31, 2016. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest-quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

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 gave 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.

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. State Board regulations 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.

Where Does my Water Come From?

Calaveras 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 U.S. EPA's Surf Your Watershed at www.epa.gov/surf.

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.org, or call (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.



Missed Monitoring

In 2016, our Sheep Ranch Water System failed to sample the treated water for General Mineral and General Physical parameters. Sampling was done in February 2017, and all results came back good. We have already taken the steps to ensure that adequate monitoring and reporting will be performed in the future so that this oversight will not be repeated.

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.

Test Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; 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.

We participated in the 3rd stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (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. Contact us for more information on this program.

REGULATED SUBSTANCES

				Copper Cove		Ebbetts Pass			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2016	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.54	1.03–2.18	1.24	0.75–1.85	No	Drinking water disinfectant added for treatment
Control of DBP Precursors [TOC] (Units)	2016	TT	NA	1.75	1.3–2.8	1.63	1.2–2.8	No	Various natural and man-made sources
Fluoride (ppm)	2016	2.0	1	ND	NA	ND	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (HAAs) (ppb)	2016	60	NA	44.5	26–94	41	19–69	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2016	45	45	0.34	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)	2016	80	NA	52	23–91	50	17–100	No	By-product of drinking water disinfection
Turbidity ² (NTU)	2016	TT	NA	0.430	0.030–0.430	0.24	0.07–0.24	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2016	TT = 95% of samples meet the limit	NA	100	NA	100	NA	No	Soil runoff

REGULATED SUBSTANCES

				Jenny Lind		Sheep Ranch			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2016	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.91	1.69–2.21	0.95	0.62–1.24	No	Drinking water disinfectant added for treatment
Control of DBP Precursors [TOC] (Units)	2016	TT	NA	1.91	1.72–2.06	0.95	0.56–1.8	No	Various natural and man-made sources
Fluoride (ppm)	2016	2.0	1	0.068	NA	ND	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (HAAs) (ppb)	2016	60	NA	54	31–54	30	NA	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2016	45	45	2.2	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)	2016	80	NA	61.5	37.3–84.7	38	NA	No	By-product of drinking water disinfection
Turbidity ² (NTU)	2016	TT	NA	0.101	0.059–0.101	0.19	0.1–0.19	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2016	TT = 95% of samples meet the limit	NA	100	NA	100	NA	No	Soil runoff

REGULATED SUBSTANCES

				West Point-Bear Creek		Wallace Water Treatment Plant			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2016	[4.0 (as Cl ₂)]	[4 (as Cl ₂)]	1.41	1.04–1.62	1.01	0.72–1.21	No	Drinking water disinfectant added for treatment
Control of DBP Precursors [TOC] (Units)	2016	TT	NA	1.58	1.00–2.30	NA	NA	No	Various natural and man-made sources
Fluoride (ppm)	2016	2.0	1	NA	NA	0.17	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids (HAAs) (ppb)	2016	60	NA	33.75	25–41	ND	NA	No	By-product of drinking water disinfection
Nitrate [as nitrate] (ppm)	2016	45	45	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)	2016	80	NA	38.5	35–41	2.9	NA	No	By-product of drinking water disinfection
Turbidity ² (NTU)	2016	TT	NA	0.08	0.06–0.08	NA	NA	No	Soil runoff
Turbidity (Lowest monthly percent of samples meeting limit)	2016	TT = 95% of samples meet the limit	NA	100	NA	NA	NA	No	Soil runoff

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

				Copper Cove		Ebbetts Pass		Jenny Lind			
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	0.85	0/20	0.24 ³	0/30 ³	1.0 ³	0/30 ³	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2015	15	0.2	ND	0/20	2.0 ³	0/30 ³	3.5 ³	0/30 ³	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.

				Sheep Ranch		West Point-Bear Creek		Wallace Water Treatment 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 water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

				Copper Cove		Ebbetts Pass			
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2016	500	NS	6.3	NA	2.8	NA	No	Runoff/leaching from natural deposits; seawater influence
Corrosivity (Units)	2016	Noncorrosive	NS	-0.73	NA	-2.3	NA	No	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Iron (ppb)	2016	300	NS	ND	NA	ND	NA	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2016	50	NS	6.4	NA	5.1	NA	No	Leaching from natural deposits

SECONDARY SUBSTANCES													
				Copper Cove		Ebbetts Pass							
SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE				
Specific Conductance (µS/cm)	2016	1,600	NS	150	NA	35	NA	No	Substances that form ions when in water; seawater influence				
Sulfate (ppm)	2016	500	NS	7.8	NA	0.52	NA	No	Runoff/leaching from natural deposits; industrial wastes				
Total Dissolved Solids (ppm)	2016	1,000	NS	100	NA	35	NA	No	Runoff/leaching from natural deposits				
Zinc (ppm)	2016	5.0	NS	0.10	NA	0.16	NA	No	Runoff/leaching from natural deposits; industrial wastes				

SECONDARY SUBSTANCES													
				Jenny Lind		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	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Chloride (ppm)	2016	500	NS	8.3	NA	4.2	NA	1	ND-2.0	6.9	NA	No	Runoff/leaching from natural deposits; seawater influence
Corrosivity (Units)	2016	Noncorrosive	NS	-0.21	NA	-1.4	NA	-1.1	NA	-0.6	NA	No	Natural or industrially influenced balance of hydrogen, carbon and oxygen in the water; affected by temperature and other factors
Iron (ppb)	2016	300	NS	ND	NA	ND	NA	ND	NA	44.7	26-63	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2016	50	NS	8.8	6.0-13.0	2.1	NA	ND	NA	30.1	10-31	No	Leaching from natural deposits
Specific Conductance (µS/cm)	2016	1,600	NS	200	NA	62	NA	52	46-58	180	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2016	500	NS	17	NA	1.1	NA	0.26	0-0.53	12	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2016	1,000	NS	130	NA	49	NA	37	34-40	165	NA	No	Runoff/leaching from natural deposits
Zinc (ppm)	2016	5.0	NS	0.053	NA	0.085	NA	ND	NA	41	NA	No	Runoff/leaching from natural deposits; industrial wastes

UNREGULATED SUBSTANCES †														
		Copper Cove		Ebbetts Pass		Jenny Lind		Sheep Ranch		West Point-Bear 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	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Bromodichloromethane (ppb)	2016	3.5	2.0-5.6	2.36	1.2-3.4	9.8	6.4-9.8	ND	NA	3.5	2.2-5.3	0.72	NA	By-product of drinking water disinfection
Chloroform (ppb)	2016	48.9	21-85	49	15-99	74	30-74	13	NA	36.25	33-39	0.73	NA	By-product of drinking water disinfection
Hardness (ppm)	2016	61	NA	8.5	NA	82	NA	17	NA	21	NA	42	NA	Caused by two naturally occurring substances: Calcium and Magnesium
Magnesium (ppm)	2016	8.9	NA	0.62	NA	7.8	NA	1.4	NA	NA	NA	4.7	NA	Naturally occurring
Sodium (ppm)	2016	8.1	NA	3.8	NA	9.4	NA	4.7	NA	6.7	NA	19	NA	Naturally occurring salt present in the water

UNREGULATED CONTAMINANT MONITORING RULE - PART 3 (UCMR3) ⁴

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	Ebbetts Pass		Jenny Lind	
		AMOUNT DETECTED	RANGE LOW-HIGH	AMOUNT DETECTED	RANGE LOW-HIGH
Chlorate (ppb)	2015	NA	NA	260	150–420
Chromium (ppb)	2015	NA	NA	0.1	ND–0.2
Chromium VI [Hexavalent Chromium] (ppb)	2014	ND	NA	0.068	0.056–0.092
Strontium (ppb)	2014	35.1	29–38	130 ⁵	110–140 ⁵
Vanadium (ppb)	2014	ND	NA	0.62	0.41–0.81

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.

² 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.

³ Sampled in 2016.

⁴ 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 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 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.