

# Christian Valley Park CSD

## *Water Quality Report – 2019*

**Annual Water Quality Report Requirements.** California water retailers must meet standards established by the Environmental Protection Agency (EPA) and the State Water Resource Control Board. The Department enforces drinking water standards within the State. Under State and Federal laws, we are required to send you an annual report on our water quality. Included are details about where your water comes from, what it contains, and how it compares to standards.

Our goal is, and always has been, to provide you with a safe and dependable supply of water. Your drinking water consistently meets and exceeds State and Federal standards. We are committed to providing you with information because informed customers are our best allies. For more information about your water please call Gerry LaBudde at 530/637-4441.

**Spanish Speaking Customers.** Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

**Water Supply Source.** Sierra snowmelt run-off from the Yuba and Bear River water sheds flows through Lake Spaulding, and the Pacific Gas and Electric (PG&E) Drum Forebay. Water is conveyed through natural water courses, and PG&E and Nevada Irrigation District canals to Rollins Reservoir, then into PG&E's Bear River Canal, to Placer County Water Agency's Bowman Canal, and to the Christian Valley water treatment plant. PCWA has completed and updated a Sanitary Survey and Source Water Assessment of the Yuba-Bear River watershed (2017). To review the Sanitary Survey and Watershed Assessment, please contact PCWA at 530-823-4850.

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

**Environmental Influences on 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, radio-active material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water **BEFORE WE TREAT IT** 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 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 and residential uses.
- **Radioactive contaminants**, which are naturally occurring.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

**Ensuring Safety.** In order to ensure that tap water is safe to drink, the Department prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. We treat our water according to the Department's regulations. The Department's Food and Drug Branch regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

### **Note to At-Risk Water Users**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised 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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### **TERMS USED IN THIS REPORT:**

**Maximum Contaminant Level (MCL):** 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 are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** 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. Environmental Protection Agency (USEPA).

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

**Secondary Drinking Water Standards (SDWS):** MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels

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

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

**Public Health Goal (PHG):** 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 Environmental Protection Agency

**Maximum Residual Disinfectant Level (MRDL):** The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

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

**Variations and Exemptions:** Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

**ND:** not detectable at testing limit

**ppm:** parts per million or milligrams per liter (mg/L)

**ppb:** parts per billion or micrograms per liter (ug/L)

**ppt:** parts per trillion or nanograms per liter (ng/L)

**pCi/L:** picocuries per liter (a measure of radiation)

**2019 Water Quality Data.** The tables below lists all the drinking water contaminants that we detected. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Unless otherwise noted, the data presented in this table is from testing done January 1-December 31, 2019.

**Regulated Contaminants with Primary MCLs (samples collected in 2018 unless noted)**

Microbiological Contaminants	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria	Health Effects
Total Coliform Bacteria (2 routine samples collected every month)	(In a month) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
Fecal Coliform or <i>E. coli</i> (2 routine samples collected every month)	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.

**Regulated Contaminants with Primary MCLs (samples collected in 2019 unless noted) – continued**

<b>Parameters/Constituents</b>	<b>Units</b>	<b>State MCL</b>	<b>MCLG (or PHG)</b>	<b>Range</b>	<b>Detected Level</b>	<b>Likely Source of Contamination</b>	<b>Health Effects</b>
Total Trihalomethanes	ppb	80	n/a	41.0 –91.8	51.1 <sup>(a)</sup>	Byproduct of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.
HAA5	ppb	60	n/a	25.0- 41.0	31.8 <sup>(a)</sup>	Byproduct of drinking water chlorination	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

(a) Based on Locational Running Annual Average (LRAA) in 2019.

**Regulated Contaminants with Secondary MCLs (samples collected in 2019 – unless noted)**

Parameters/Constituents	Units	State MCL	MCLG or (PHG)	Range (avg.)	Detected Level	Likely Source of Contamination
Total Dissolved Solids (2016)	ppm	1,000	none	---	38	Runoff/leaching from natural sources
Specific Conductance (2017)	micro-mhos	1,600	none	---	51	Substances that form ions when in water
Chloride	ppm	500	none	---	4.14	Runoff/leaching from natural sources
Sulfate	ppm	500	none	---	1.58	“ “
Aggressive Index (2016)	NU	none	none	---	9.5	Elemental balance caused by temperature and other factors.
Iron	ppb	300	1	---	100	Leaching from natural deposits; industrial wastes

**Sampling Results Showing Treatment of Surface Water Sources- Conventional Filtration**

Contaminant	MCL	PHG	Range	Sample Date	Violation	Typical Source
Turbidity	TT(a) = 1 NTU	N/A	0.010	2019	No	Soil runoff
	TT = 95% of samples ≤0.3 NTU		0.270			
Turbidity Performance Standards (b) (that must be met through the water treatment process)			Turbidity of the filtered water must: 1 – Be less than or equal to 0.3 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU for more than eight consecutive hours. 3 – Not exceed 5.0 NTU at any time.			
Lowest monthly percentage of samples that met Turbidity Performance Standards			100%			
Highest single turbidity measurement during the year			0.270			
Number of violations of any surface water treatment requirements			0			

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance.

Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

**Additional Constituents Analyzed (samples collected in 2019 unless noted)**

Parameters/Constituents	Units	State MCL	MCLG or (PHG)	Range	Detected Level (avg.)	Likely Source of Contamination
Total Organic Carbon	ppm	n/a	None	0.82 – 0.87	0.80	Naturally Present
Total Alkalinity	ppm	n/a	None	---	19.7	Naturally Present
Total Hardness	ppm	n/a	None	---	13.4	Runoff/leaching from natural deposits
pH	pH Units	> 6 - <9	none	---	7.8	n/a
Bicarbonate	ppm	n/a	None	---	19.7	Naturally Present
Calcium	ppm	n/a	None	---	3.62	Naturally Present
Sodium	ppm	n/a	None	---	30.4	Naturally Present
Aluminum	ugl	n/a	None	---	78.8 B	Naturally Present

**Lead and Copper – (Most Recent Samples Collected in 2019)**

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ug/l)	12/4/2019	10	4.1	1	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/l)	12/4/2019	10	0.019	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

**Information On Lead.** 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. Christian Valley Park CSD is 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 <http://www.epa.gov/safewater/lead>



