

# Big Valley Rancheria Water District (BVRWD)



## Big Valley Rancheria Water District Annual Water Quality Report

Public Water System Number #090605164  
2020

This report is a snapshot of your water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

### **Do I need to take special precautions?**

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. The Environmental Protection Agency (EPA) and Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

### **Where does my water come from?**

Your water comes from 1 ground water source.

### **Why are there contaminants in my 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791). 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 including:

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, which can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses; 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 storm water runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**WATER QUALITY TABLE**

The table below lists all of the drinking water contaminants detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminant	MRDLG	MRDL	Your Water	Range		Sample Date	MRDL Exceeded	Typical source
				Low	High			
<b>Disinfectants</b>								
Chlorine Units' ppm	4	4	1.6054	0.81	2.2	2020	No	Drinking water additive used for disinfection
<b>Disinfection byproducts</b>								
<b>Disinfection byproducts</b>								
Five haloacetic acids (HAA5) Units: ppb	N/A	60	33.7	N/A	N/A	2020	No	By-products of drinking water chlorination
Total Trihalomethanes Units: ppb	N/A	80	23.78	N/A	N/A	2020	No	By-products of drinking water chlorination
<b>Inorganic contaminants</b>								
<b>Inorganic contaminants</b>								
Sodium Units: ppm			19	N/A	N/A	2019	N/A	Erosion of natural deposits; saltwater intrusion
<b>Lead and Copper Rule</b>								
<b>Lead and Copper Rule</b>								
Contaminant	MCLG	MCL	Your Water	Range		Sample date	Violation	Typical source
				Low	High			
<b>Lead and Copper Rule</b>								
<b>Lead and Copper Rule</b>								
Contaminant	MCLG	Action Level	Your Water	Range		Sample date	A.L Exceeded	Typical source
				Low	High			
<b>Lead and Copper Rule</b>								
<b>Lead and Copper Rule</b>								

1 <sup>st</sup> Copper Sample set Units: ppm 90 <sup>th</sup> Percentile	1.3	1.3	1.1	1 site over action level		2020	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
1 <sup>st</sup> Lead sample set Units: ppb 90 <sup>th</sup> Percentile	0	15	17	3 sites over action level		2020	Yes	Corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
2 <sup>nd</sup> Copper Sample Set Units: ppm, 90 <sup>th</sup> Percentile	1.3	1.3	1.2	2 sites over action level		2020	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2 <sup>nd</sup> Lead Sample Set Units: ppb, 90 <sup>th</sup> Percentile	0	15	22	4 sites over action level		2020	Yes	Corrosion of household plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Contaminant	MCLG	MCL	Your Water	Range		Sample date	Violation	Typical source
				Low	High			
<b>Water Quality Parameters</b>								
Alkalinity Units: ppm			320	300	320	2020	N/A	Dependent on natural mineral content and pH
Calcium Units: ppm			24	23	24	2020	N/A	Erosion of Natural Deposits
Orthophosphate Units: ppm			2.8	2.2	2.8	2020	N/A	Drinking water additive to control leaching of lead and copper from household plumbing
pH Units: pH			7.6	ND	7.6	2020	N/A	Dependent upon natural mineral content and pH

Specific Conductivity Units: umho/cm			640	620	640	2020	N/A	Dependent upon natural mineral content and pH
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**Health Effects Language**

**2<sup>nd</sup> Lead Sample Set**

Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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**Special Education Statements**

**Additional Information for 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. PWS system 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 at 1-800-426-4791 or at <http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>.

**Microbiological Testing**

We are required to test your water regularly for signs of microbial contamination. Positive test results could lead to follow-up investigations called assessments and potentially the issuance of public health advisories. Assessments could lead to required corrective actions. The information below summarizes the results of those tests.

Sampling requirements	Sampling conducted. (months)	Total positive <i>E.coli</i>	Assessment triggers	Assessments conducted
2 samples due monthly Units: MPN/100 ml of water	12 out of 12	0	0	0

### Significant Deficiencies

*Sanitary deficiencies are defects in a water system’s infrastructure, design, operation, maintenance, or management that cause, or may cause interruptions to the “multiple barrier” protection system and adversely affect the system’s ability to produce safe and reliable drinking water in adequate quantities.*

*The following is a listing of significant deficiencies that have yet to be corrected. Your public water system is still working to correct these deficiencies and interim milestones are shown, as applicable.*

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#### **Deficiency Title: Lead Exceedance and Inadequate Iron and Manganese Treatment**

Date Identified: 4/25/2019 Overall Due Date: 12/31/2021

Deficiency Description: Current treatment plant is not designed to adequately treat for corrosivity, iron or manganese.

Corrective Action Plan: This deficiency should be corrected by the construction of the new treatment plant.

#### **Deficiency Title: Production Well (Well 1) and Production Well Pressure Control Assembly – Surge Control**

Date Identified: 4/25/2019 Overall Due Date: 12/31/2021

Deficiency Description: The system may have a design issue related to a pressure relief valve at the well.

Corrective Action Plan: This deficiency MAY be corrected by the construction of the new facilities.

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**Deficiency Title: Production Well (Well 1) and Production Well Pressure Control Assembly – Surge Control**

Date Identified: 4/25/2019 Overall Due Date: 12/31/2021

Deficiency Description: The treatment plant has an issue with surge control (excessive pressure) when the treatment plant shuts off

Corrective Action Plan: This deficiency will be corrected by the time the construction of the new facilities is completed.

**Definitions**

Term	Definition
ppm	Parts per million (ppm): milligrams per liter (mg/L)
ppb	Parts per billion (ppb): micrograms per liter (µg/L)
MPN/100 ml of water	Most Probable Number in 100 ml of water
Positive samples	Positive samples/yr. Number of positive samples taken per year
% positive samples/month	% positive samples/month: % of samples taken monthly that were positive
N/A	N/A: Not applicable
ND	Not detected
Mrem/yr	Millirem per year
MRDLG	Maximum Residual Disinfection Level Goal
MRDL	Maximum Residual Disinfection Level
MCLG	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 allow for a margin of safety
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLG as feasible using the best available treatment technology
TT	Treatment technique. A required process intended to reduce the level of a contaminant in drinking water
AL	Action Level: The concentration of a contaminant which, if exceeded, trigger treatment or other requirements which a water system must follow

**How can I get involved?**

Please feel free to contact the number provided below for more information. Your input is important to us!

**For more information please contact**

John W. Gichuki, Public Works Director,  
 Big Valley Rancheria Public Works, 2726 Mission Rancheria Road, Lakeport, California 95453  
**Phone:** (707) 263-3924 Ext. 133; **Fax:** (707) 263-5378; **Cell:** (707) – 533-6399

### **Water conservation tips**

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day?. To save water consider.

- Take shorter showers. Cutting shower time to 5 minutes can reduce water usages and the CO<sub>2</sub> emissions by 70-80%
- Use water-efficient retrofits including Ultra low flow toilets (UHET), showerheads and aerators.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Turn off the tap while brushing teeth or shaving.
- Use water left over from cooking for houseplants.
- Choose landscaping plants with low water requirements. A typical lawn requires regular watering to maintain its “greenness.” Consider reducing your lawn size and replacing turf grass with native plants, shrubs, and trees that generally grow well without a lot of excess watering.
- Carry a refillable water container rather than buying bottled water. Production, transportation, and disposal of bottled water consume large quantities of water (and energy).
- Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

For more water conservation information see the EPA Water Sense website at <http://www.epa.gov/watersense>