

# Bonny Doon Union Elementary School District

## Water Quality Report – 2019

Santa Cruz County Water System I.D. No. 4400751

\*\*\*\*\*Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.\*\*\*\*\*

The Bonny Doon Union Elementary School District has its' own water system. The water system is classified as a "non-community, non-transient water system". As such, we are required to provide this *Water Quality / Consumer Confidence Report* to you, the water user. In 2019, water from the system was tested and compared to the EPA and State drinking water health standards. **Source water supplied to and distributed in the system met all EPA and State drinking water standards.** This brochure reviews 2019's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

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 USEPA's Safe Drinking Water Hotline (800-426-4791).

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, person 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. USEPA / Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants that may be present in water are available from the Safe Drinking Water Hotline (800-426-4791).

Your water comes from an on-site water production well sunk approximately 300-feet into a fractured bedrock aquifer beneath the School. Water from the well is pumped into two storage tanks – a 10,000-gallon concrete tank and a 5,000-gallon polyethylene (plastic) tank – that supply potable water for domestic (drinking and hand washing) use at the school. Please see the notes below regarding drinking water. The well and storage tanks are

located on the east side of campus, adjacent to Ice Cream Grade.

Sources of drinking water (both tap water and bottled water) include river, 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.

Contaminants that may be present in source water before it is treated include:

- \*Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic system, agricultural livestock operations, and wildlife.

- \*Inorganic contaminants, such as salts and metals, that 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 that may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- \*Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

- \*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 storm water runoff, agriculture application, and septic systems.

In order to ensure that tap water is safe to drink, the USEPA and the State Water Resources Control Board – Division of Drinking Water (DDW) prescribe regulations that limit the number of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

No contaminant exceedances were found in the School's water in 2019.

## WATER QUALITY DATA

The following table lists all the drinking water contaminants and compounds that the source well was tested for. The presence of any compound in the water does not necessarily indicate that the water poses a health risk. The State requires monitoring for certain compounds less than once per year because the concentrations of these compounds are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, is more than one year old.

In the fall of 2018 we secured a Technical Assistance grant from the State Water Board/Proposition 1 funds for the design of water system infrastructure upgrades, including storage tank replacement, equipment and distribution system upgrades, and the installation of a fire water storage tank. This work is on-going with a goal of completing the design by the end of 2019.

**The following table summarizes the Source Well (W-3) Laboratory Analytical Results. Terms and abbreviations used in the table include:**

- **parts per million (ppm):** a unit of measurement describing the concentration of a contaminant in water. It is equivalent to milligrams per liter (mg/L)
  - The time equivalent of 1 ppm is 1 second in 11.5 days
- **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 (MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.
- **Regulatory Action Level (AL):** The concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.

Please direct any questions about the potable water system to Mike Heffner (Bonny Doon School Superintendent/Principal) at 831.427.2300 or Craig Drizin (Certified Water Distribution Operator - Weber, Hayes and Associates) at 831.722.3580

**Summary of Source Well W-3 Analytical Results**  
**Bonny Doon Union Elementary School District, Water System I.D. No. 4400751**

Analyte	Date Sampled	RESULT in ppm	LIMIT DW - MCL in ppm*
<b>PRIMARY INORGANICS</b>			
Aluminum (Al)	04/08/14	< 0.05	1.0 (0.2 <sup>2</sup> )
Antimony (Sb)	04/08/14	< 0.006	0.006
Arsenic (As)	04/18/17	< 0.002	0.01
Barium (Ba)	04/08/14	< 0.1	1.0
Beryllium (Be)	04/08/14	< 0.001	0.004
Boron (B)	04/08/14	< 0.1	*NL: 1.0
Cadmium (Cd)	04/08/14	< 0.001	0.005
Chromium (Cr)	04/08/14	0.001	0.05
Hexavalent Chromium (Cr <sup>+6</sup> )	11/12/14	< 0.00020	0.01
Copper (Cu)	04/08/14	< 0.050	*AL: 1.3 (1.0 <sup>2</sup> )
Cyanide (Cn)	04/08/14	< 0.1	0.15
Fluoride (F)	04/08/14	< 0.10	2.0
Lead (Pb)	04/08/14	< 0.005	*AL: 0.015
Mercury (Hg)	04/24/14	< 0.0010	0.002
Nickel (Ni)	04/08/14	< 0.01	0.1
Nitrate (as N) <sup>a</sup>	04/03/19	1.0	10
Nitrite (as N)	04/19/17	< 0.10	1.0
Nitrate-N + Nitrite-N	04/19/17	0.77	10
Perchlorate	04/09/18	< 0.006	0.006
Selenium (Se)	04/08/14	< 0.005	0.05
Silver (Ag)	04/08/14	< 0.010	0.1 <sup>2</sup>
Thallium (Tl)	04/08/14	< 0.001	0.002
<b>SECONDARY / GENERAL MINERAL &amp; PHYSICAL</b>			
Bicarbonate Alk. (as HCO <sub>3</sub> )	12/10/19	140	—
Carbonate Alk. (as CO <sub>3</sub> )	12/10/19	ND	120
Calcium (Ca)	12/10/19	43	—
Chloride (Cl)	12/10/19	15	500 <sup>2</sup>
MBAS (Surfactants)	04/08/14	0.076	0.5 <sup>2</sup>
Magnesium (Mg)	12/10/19	4.4	—
Manganese (Mn)	12/10/19	ND	0.05 <sup>2</sup>
Potassium (K)	12/10/19	2.1	—
Sodium (Na)	12/10/19	14	—
Sulfate (SO <sub>4</sub> )	12/10/19	24	500 <sup>2</sup>
Total Iron (Fe)	12/10/19	ND	0.3 <sup>2</sup>
Total Alkalinity (as CaCO <sub>3</sub> )	12/10/19	110	—
Total Hardness (as CaCO <sub>3</sub> )	12/10/19	130	—
Total Dissolved Solids	12/10/19	190	1,000 <sup>2</sup>
Zinc (Zn)	12/10/19	ND	5.0 <sup>2</sup>

**Summary of Source Well W-3 Analytical Results**  
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Analyte	Date Sampled	RESULT in ppm	LIMIT DW - MCL in ppm*
<b>OTHER</b>			
pH value	12/10/19	6.7	6.5 - 8.5
Conductivity (micromhos/cm)	12/10/19	300	1,600 <sup>2</sup>
Color (Co/Pt) (Units)	12/10/19	ND	15
Odor (Threshold Number)	12/10/19	ND	3 <sup>2</sup>
Turbidity (NTU)	12/10/19	ND	5 <sup>2</sup>
Synthetic Organic Compounds	04/18/17	All ND	varies
Volatile Organic Compounds**	03/20/18	All ND MTBE: < 0.00050 <sup>b</sup>	Varies MTBE: 0.013 <sup>b</sup>
1,2,3 TCP	11/14/18	ND	0.000005 <sup>c</sup>

**NOTES:**

<sup>2</sup> = Secondary MCLs are set to protect the odor, taste, and appearance of drinking water and DO NOT affect health at that established level.

MCL = Maximum Contaminant Level. Based on US Environmental Protection Agency, *National Primary Drinking Water Regulations*, May 2009

DW-MCL = MCLs for Title 22 Drinking Water

ND = Not Detected at or above the laboratory's Reporting Limit

1,2,3- TCP = 1,2,3-Trichloropropane

parts per million (ppm) = milligrams per liter (mg/L)

pCi/L = picocuries per liter

a = Reporting units for Nitrates were modified by the State Water Resources Control Board's Division of Drinking Water from Nitrate (as NO<sub>3</sub>) to Nitrate (as Nitrogen), effective by no later than January 1, 2016.

**Note:** the change applies merely to reporting units. The MCL was not made more stringent.

b = MTBE results and MCL/Action Level shown due to its' detection in Well W-2 (properly destroyed).

c = MCL for 1,2,3-TCP was adopted by the State Water Board DDW January 2018 requiring initial sampling.

\*EPA Action Levels (AL) are shown for analytes which do not have an MCL

\*\* By EPA Method 8260B in 2014. By EPA Method 524.2 since. All compounds have not been detected (Non-Detect = ND). MCLs & PHGs are different for each compound. MCL/Action Level for MTBE shown due to its' detection in Well W-2 (properly destroyed).

Source water for the Potable Water System is from well W-3 only from May 13, 2014 to date.