2016 Water Quality Report

Berrendos School

Here at Berrendos School we strive to provide our students and staff with a safe and healthy campus, which naturally includes a fresh and dependable drinking water supply. We want you to understand the efforts we make to continually monitor our water quality and to protect our water resources.

We regularly test our drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of our monitoring for the period of January 1st through December 31st, 2014.

Our drinking water is supplied by one treated groundwater well (Well).

This source was evaluated by Tehama County in March 2002, to determine if there were possible contaminating activities that might compromise the quality of the water. At the time, there were no associated contaminants detected in the water supply, however the source was still considered vulnerable to a high density (more than 1 per acre) of septic systems located in the area.

This year we installed a water meter on our well.

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.

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 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.

Organic chemical contaminants, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, agricultural application, and septic systems.

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

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

Please note that 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 the water poses a health risk.**

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. USEPA/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 Drinking Water Hotline (1-800-426-4791) or online at:

http://water.epa.gov/drink/standards/hascience.cfm

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

For questions or concerns about your drinking water you may attend the board meeting held the **2nd Tuesday of each month at Antelope School District,** or contact

Adam Johnson at **530 727-7329**

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) or Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA. PHGs are set by the California EPA.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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

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

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 that a water system must follow.

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

Level 1 Assessment: A level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MDL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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)

ppq: parts per quadrillion or pictogram per liter (pg/L)

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

These tables show only the drinking water contaminants that were *detected* during the most recent sampling for each constituent. The State Water Resources Control Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an MCL, MRDL, or TT is asterisked and explained below.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	(in a month) 0	none	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or *E. coli* (state Total Coliform Rule)	(in the year) 0	none	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)	(from 4/1/16-12/31/16) 0	none	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli.*

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb) 9/2/15	5	ND	none	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 9/2/15	5	0.514	none	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

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. Berrendos School 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.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	12/2/09	18		N/A	N/A	Generally found in ground & surface water
Hardness (ppm)	12/2/09	121		N/A	N/A	Generally found in ground & surface water

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Gross Alpha (pCi/L)	7/3/13	3.65		15	(0)	Erosion of natural deposits
Nitrate as N (ppm)	2/3/16	1.66		10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Arsenic (ppb)	2/3/16	6		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium (ppm)	12/2/09	0.04		1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Chromium, Total (ppb)	12/2/09	3		50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Hexavalent Chromium (ppb)	10/8/14	2.6		10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm)	12/2/09	6		500	N/A	Runoff/leaching from natural deposits; seawater influence
Specific Conductance (µS/cm)	12/2/09	308		1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	12/2/09	7.0		500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	12/2/09	210		1000	N/A	Runoff/leaching from natural deposits

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language
Vanadium (ppb)	12/2/09	20	50	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals