

2022 Consumer Confidence Report

Water System Name: CITY OF RED BLUFF

Report Date: June 2023

We test the 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 1 - December 31, 2022.

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

Type of water source(s) in use: According to SWRCB records, this Source is Groundwater. This Assessment was done using the Default Groundwater System Method.

Your water comes from 11 source(s): WELL 03, WELL 04, WELL 05, WELL 06, WELL 07, WELL 08, WELL 09, WELL 10, WELL 11, WELL 12 and WELL 14

Opportunities for public participation in decisions that affect drinking water quality: City Council meetings are the 1st and 3rd Tuesday of every month. They are at Red Bluff City Hall, 555 Washington St., Red Bluff, Ca 96080 and they start at 6:00 pm.

For more information about this report, or any questions relating to your drinking water, please call (530) 527-4300 ext 2 and ask for Chuck Vereschagin or email cvereschagin@cityofredbluff.org or visit our website at www.cityofredbluff.org.

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically 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).

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 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 the contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for the 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 that a water system must follow.

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 MCL 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

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

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

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

NTU: Nephelometric Turbidity Units

umhos/cm: micro mhos per centimeter

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 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 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 Resource Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Water 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.

Table 1 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER							
Lead and Copper (complete if lead or copper detected in last sample set)	Sample Date	No. of Samples	90th percentile level detected	No. Sites Exceeding AL	AL	PHG	Typical Sources of Contaminant
Copper (mg/L)	(2022)	30	0.06	0	1.3	.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2 - SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant
Sodium (mg/L)	(2014 - 2016)	19	12 - 25	none	none	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	(2014 - 2016)	85.3	76.2 - 98.5	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 3 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Sources of Contaminant
Arsenic (ug/L)	(2020 - 2022)	ND	ND - 5	10	0.004	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes

Hexavalent Chromium (ug/L)	(2014)	4.15	ND - 6.51		0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits.
Fluoride (mg/L)	(2014 - 2016)	ND	ND - 0.1	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate as N (mg/L)	(2022)	1.3	0.6 - 1.9	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	(2014 - 2016)	1	0.4 - 1.4	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Gross Alpha (pCi/L)	(2016)	ND	ND - 1.32	15	(0)	Erosion of natural deposits.

Table 4 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Sources of Contaminant
Chloride (mg/L)	(2014 - 2016)	4	3 - 7	500	n/a	Runoff/leaching from natural deposits; seawater influence
Color (Units)	(2014 - 2016)	ND	ND - 5	15	n/a	Naturally-occurring organic materials
Specific Conductance (umhos/cm)	(2014 - 2016)	250	210 - 282	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate (mg/L)	(2014 - 2016)	3.2	ND - 5.2	500	n/a	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (mg/L)	(2014 - 2016)	168	150 - 190	1000	n/a	Runoff/leaching from natural deposits
Turbidity (NTU)	(2014 - 2016)	0.2	ND - 0.4	5	n/a	Soil runoff

Table 5 - ADDITIONAL DETECTIONS

Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	Notification Level	Typical Sources of Contaminant
Calcium (mg/L)	(2014 - 2016)	21	18 - 23	n/a	n/a
Magnesium (mg/L)	(2014 - 2016)	8	7 - 10	n/a	n/a
pH (units)	(2014 - 2016)	7.6	7.2 - 7.9	n/a	n/a
Alkalinity (mg/L)	(2014 - 2016)	107	90 - 120	n/a	n/a
Aggressiveness Index	(2014 - 2016)	11.3	10.9 - 11.6	n/a	n/a
Langelier Index	(2014 - 2016)	-0.5	-0.9 - -0.2	n/a	n/a

Any violation of MCL, AL or MRDL is highlighted. Additional information regarding the violation is provided later in this report.

Additional General Information on 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 the 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 (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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).

Lead Specific Language for Community Water Systems: 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 the service lines and home plumbing. *City of Red Bluff* 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/lead>.

Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an E. coli MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. Routine coliform testing indicated the need to investigate potential issues with water distribution. When test results detect certain amounts within the sample, the City Conducts Assessments to identify and correct any issues with the system.

During the past year, 5 Level 2 Assessments were required and conducted with the City of Red Bluff water system. All corrective actions resulting from the 5 Level 2 Assessments were addressed immediately per State of California protocols and no further action was required.

2022 Consumer Confidence Report Drinking Water Assessment Information

Assessment Information

A Drinking Water Source Assessment was conducted for the WELL 01, WELL 02, WELL 03, WELL 04, WELL 05, WELL 06, WELL 07, WELL 08, WELL 09, WELL 10, WELL 11, WELL 12, WELL 14 of the CITY OF RED BLUFF water system on February, 2003.

- WELL 03 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Underground storage tanks - Confirmed leaking tanks
- WELL 04 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Sewer collection systems
- WELL 05 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Automobile - Gas stations
Historic gas stations
Underground storage tanks - Confirmed leaking tanks
- WELL 06 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Sewer collection systems
- WELL 07 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Automobile - Gas stations
Historic gas stations
Underground storage tanks - Confirmed leaking tanks
- WELL 08 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Automobile - Gas stations
- WELL 09 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Metal plating/ finishing/fabricating
- WELL 10 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Automobile - Gas stations
Septic systems - high density [>1/acre]

WELL 11 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Automobile - Gas stations

WELL 12 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Airports - Maintenance/fueling areas
Underground storage tanks - Confirmed leaking tanks

WELL 14 - is considered most vulnerable to the following activities not associated with any detected contaminants:
Septic systems - high density [$>1/\text{acre}$]

Discussion of Vulnerability

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source. Water sampling occurs on regular intervals to assure adherence to water quality standards.

Acquiring Information

A copy of the complete assessment may be viewed at:

www.cityofredbluff.org

or

City of Red Bluff

555 Washington St.

Red Bluff, Ca 96080

You may request a summary of the assessment be sent to you by contacting:

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