

## 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.

**Variations 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 picograms per liter (pg/L)

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

# 2022 Consumer Confidence Report Cottonwood Water District

Here at Cottonwood Water District, we want you to understand the efforts we make to provide you with a safe and dependable drinking water supply. We continually monitor our drinking water quality and strive to protect our water resources. We regularly test our drinking water for many different constituents as required by State and Federal Regulations. This “Water Quality Report” includes those constituents that were **detected** in 2022 and may include earlier monitoring data.

Our drinking water is supplied by **five groundwater wells** (Wells 01 – 05), located throughout the district.

The sources were evaluated by the State in April 2002, to determine if there were possible contaminating activities that might compromise the water quality. Due to the levels of certain contaminants found at that time, the sources were considered vulnerable to contamination by nearby agricultural activities such as large-animal farming, agricultural drainage, and fertilizer, pesticide and herbicide application; as well as nearby septic systems, monitoring wells and other drinking water wells. The wells were also considered vulnerable to nearby gas stations, auto repair facilities and historic landfills; although testing

has not revealed any direct contamination from these activities. A copy of the complete report is available at 364 Knollcrest Drive, Suite 101, Redding, CA 96002. You may contact Reese Crenshaw at 530-224-4861.

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.** More information about contaminants and potential health effects can be obtained by calling the U.S. EPA’s Safe Drinking Water Hotline (1-800-426-4791).

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, 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.

US EPA/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).

*Este informe contiene información muy importante sobre su agua beber. Favor de comunicarse Cottonwood WD a 941-4274 para asistirlo en español.*

For questions or concerns about your drinking water you may attend our monthly meeting held the **2<sup>nd</sup> Wednesday of the month** or you may contact:

**John Hollmer  
530-941-4274**

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 AL, 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
<i>E. coli</i>	(in the year) 0	0	(a)	0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive, or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .					

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER							
Lead and Copper	No. of samples collected	90 <sup>th</sup> percentile level detected	No. sites exceeding AL	AL	PHG	No. of schools requesting lead sampling	Typical Source of Contaminant
Lead (ppb) 09/20/22	10	1.1	None	15	0.2	None	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm) 09/20/22	10	0.27	None	1.3	0.3	Not Applicable	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. Cottonwood Water District 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 (1-800-426-4701) or at <http://www.epa.gov/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)	04/29/14	23.6	18 - 44	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	04/29/14	57.4	35 - 63	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

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
Nitrate (as nitrogen, N) (ppm)	06/20/22	0.6	0.1 - 1.3	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Radium (pCi/L)	01/18/17	0.26	0.12 - 0.37	5	n/a	Erosion of natural deposits
Arsenic (ppb)	05/24/16	1.8	ND - 9	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Fluoride (ppm)	05/24/16	0.1	ND - 0.14	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Total Dissolved Solids (ppm)	04/29/14	152	139 - 165	1000	none	Runoff/leaching from natural deposits
Chloride (ppm)	04/29/14	7	2 - 23	500	none	Runoff/leaching from natural deposits; seawater influence
Specific Conductance or EC (µS/cm)	04/29/14	196	180 - 249	1600	none	Substances that form ions when in water; seawater influence
Turbidity	04/29/14	2.6	<0.5 - 5.2	5	none	Soil runoff
Sulfate (ppm)	04/29/14	2.2	1.6 - 2.8	500	none	Runoff/leaching from natural deposits; industrial wastes
Iron (ppb)	04/29/14	57.4	<100 - 161	300	none	Leaching from natural deposits; industrial wastes
Manganese (ppb)	04/29/14	5.6	<20 - 28	50	none	Leaching from natural deposits