

Vulnerable Population

Drinking water, including bottled water, may reasonably be expected to contain extremely low levels of some contaminants. The presence of any contaminants at the levels of concentration that may be present does not necessarily indicate that 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.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA *Safe Drinking Water Hotline* at 1-800-426-4791.

Source Water Assessment

- **LOW RISK:** Based on the information currently available on the hydrogeology and the land uses adjacent to or within the specified distance of the drinking water source(s) for this public water system, the department has given a low risk designation for the degree to which this public water system drinking water source(s) are protected. A low risk designation indicates the measures taken to protect the source water have been implemented, or the hydrogeology is such that the source water protection measures will have little impact on protection.
- Further source water assessment documentation can be obtained by contacting ADEQ.

Definitions

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria was present

Level 2 Assessment: 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 was present

Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment, or other requirements

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in 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

Maximum Residual Disinfectant Level (MRDL): The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap

Maximum Residual Disinfectant Level Goal (MRDLG): The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur

EPDS: Entry Point Into Distribution System- the point at which water is discharged into the distribution system from a well, storage tank, pressure tank or water treatment plant.

DSMRT: Distribution Maximum Residence Time- A location that provides water to customers, where the water has been in the system longest relative to the EPDS.

RAA: Running Annual Average- an average of monitoring results for the previous 12 calendar months or previous 4 quarters.

Minimum Reporting Limit (MRL): The smallest measured concentration of a substance that can be reliably measured by a given analytical method

Millirems per year (MREM): A measure of radiation absorbed by the body

Not Applicable (NA): Sampling was not completed by regulation or was not required

Not Detected (ND or <): Not detectable at reporting limit

Nephelometric Turbidity Units (NTU): A measure of water clarity

Million fibers per liter (MFL)

Picocuries per liter (pCi/L): Measure of the radioactivity in water

ppm: Parts per million or Milligrams per liter (mg/L)

ppb: Parts per billion or Micrograms per liter (µg/L)

ppt: Parts per trillion or Nanograms per liter (ng/L)

ppq: Parts per quadrillion or Picograms per liter (pg/L)

ppm/1000 = ppb

ppb/1000 = ppt

ppt/1000 = ppq

Lead Informational Statement:

Lead, in drinking water, is primarily from materials and components associated with service lines and home plumbing. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Cottonwood Municipal Water is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been sitting for several hours in your pipes, 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. 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 www.epa.gov/safewater/lead.

Water Quality Data – Regulated Contaminants

The City routinely monitors for contaminants in your drinking water in accordance with Federal and State laws. The State of Arizona requires the city to monitor for certain contaminants less than once per year because either the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Some of the City's data, although representative, may be more than one year old. The test results for Total Coliform Bacteria, E.Coli, Antimony, Asbestos, Beryllium, Cadmium, Chromium, Cyanide, Mercury, Nitrite, Selenium, Thallium, Lead, Synthetic Organic Chemicals (SOC) including Pesticides, Volatile Organic Chemicals (VOC), Haloacetic Acids (HAA5), Total Trihalomethanes (TTHM), Radionuclides and Aroclor (PCB Screening test) were "Non-Detect (ND)" and therefore were not included in this report

If you have questions pertaining to this report or on a particular contaminant, please contact Mike Traynor –Water Operations Manager at (928) 634-0186 ext. 3306.

These tables show the results of our monitoring for the period of January 1 to December 31, 2023 unless otherwise noted.

Disinfectants	MCL Violation Y or N	Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Chlorine (ppm)	N	0.67	0.61 – 0.67	MRDL=4	MRDLG=4	Qtrly 2023	Water additive used to control microbes
Lead & Copper	MCL Violation Y or N	90 th Percentile	Number of Samples Exceeds AL	AL	ALG	Sample Month & Year	Likely Source of Contamination
Copper (ppm)	N	0.22	0	1.3	1.3	Aug. 2022	Corrosion of household plumbing systems; erosion of natural deposits
Inorganic Chemicals (IOC)	MCL Violation Y or N	Running Annual Average (RAA) OR Highest Level Detected	Range of All Samples (Low-High)	MCL	MCLG	Sample Month & Year	Likely Source of Contamination
Arsenic ¹ (ppb)	N	4.0	0 – 15.0	10	0	Qtrly 2023	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.54	0.46 – 0.54	2	2	April 2022	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	N	0.32	0.24 – 0.32	4	4	April 2022	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate ² (ppm)	N	2.1	0.32 – 2.1	10	10	April 2023	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	N	32	39 (EPDS 001) 22 (EPDS 002) 37 (EPDS 003) 27 (EPDS 004) 39 (EPDS 005)	N/A	N/A	May 2018 April 2022 April 2022 April 2022 April 2022	Erosion of natural deposits

¹ **Arsenic** is a mineral known to cause cancer in humans at high concentration and is linked to other health effects, such as skin damage and circulatory problems. If arsenic is less than or equal to the MCL, your drinking water meets EPA's standards. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water, and continues to research the health effects of low levels of arsenic.

² **Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause "blue baby syndrome." Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask advice from your health care provider.