Consumer Confidence Report for Calendar Year 2017

Este informe contiene informactión muy importante sobre el aqua usted bebe.
Tradúscalo ó hable con alguien que lo entienda bien.

Cottonwood

Public Water System ID Number	Public Water System Name
AZ04-13025	Cottonwood Municipal Water CW1

Contact Name and Title	Phone Number	E-mail Address
Mike Traynor	928-634-0186 ext. 3306	mtraynor@cottonwoodaz.gov

We want our valued customers to be informed about their water quality. If you would like to learn more about what you can do to protect your drinking water sources, any questions about the annual drinking water report, to learn more about your drinking water system or to attend any of our regularly scheduled meetings, please contact us at 928-634-0186.

Drinking Water Sources

The sources of drinking water (both tap 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 pickup substances resulting from the presence of animals or from human activity.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source(s):	The City of Cottonwood's water service area for System 13-025 includes all areas in the City of Cottonwood. Within this service area boundary, there are 8 wells and 5 storage tanks (combined total of 2,150,000 gallons). The City pumps all of its water from deep groundwater wells and uses chlorination for disinfection. Well Site 1/2 (EPDS010), Well Site 4/7 (EPDS007), Well Site 5 (EPDS005), Well Site 8/9 (EPDS008), Well Site 12 (EPDS011)

Drinking Water Contaminants

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: Such as agriculture, urban storm water runoff, and residential uses that may come from a variety of sources

Organic Chemical Contaminants: Such as synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants: That can be naturally occurring or be the result of oil and gas production and mining activities.

Vulnerable Population

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. 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

Based on the information currently available on the hydrogeologic settings of and the adjacent land uses that are in the specified proximity of the drinking water source(s) of 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 that most source water protection measures are either already 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 x 1000 = ppb

ppb x 1000 = ppt

ppt x 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 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. 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

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The State of Arizona requires us to monitor for certain contaminants less than once per year because 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 our data, though representative, may be more than one year old.

We did not include the results for Total Coliform Bacteria, E.Coli, Haloacetic Acids (HAA5), Synthetic Organic Chemical (SOC) including Pesticides, Volatile Organic Chemicals (VOC) except Xylenes, Cadmium, Mercury, Nitrite, Selenium, Antimony, Beryllium, Cyanide, Nickel, Thallium and Aroclor (PCB Screening test), in this report, as the results were **non-detect** (ND). If you have questions on a particular contaminant, please contact Mike Traynor –Utilities 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, 2017 unless otherwise noted.

Disinfectants	**MCL Violation Y or N**	**Highest Level Detected**	**Range of All Samples (Low-High)**	**MRDL**	**MRDLG**	**Sample Month & Year**	**Likely Source of Contamination**
Chlorine (ppm)	N	0.91	0.48-0.91	4	0	Qtrly 2017	Water additive used to control microbes
Disinfection By-Products	**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**
Total Trihalomethanes (TTHM) (ppb)	N	0.69	0-0.69	80	N/A	8/2017	Byproduct of drinking water disinfection
Lead & Copper	**MCL Violation Y or N**	**90th Percentile**	**Number of Samples Exceeds AL**	**AL**	**ALG**	**Sample Month & Year**	**Likely Source of Contamination**
Copper (ppm)	N	0.29	0	1.3	1.3	8/2017	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	N	0	1	15	0	8/2017	Corrosion of household plumbing systems; erosion of natural deposits
Radionuclides	**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**
Alpha Emitters (pCi/L)	N	1.2	0-1.2	15	0	3/2017	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	4.7	0-8.1	10	0	Qtrly 2017	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes
Barium (ppm)	N	0.047	0.047-0.047	2	2	3/2017	Discharge of drilling wastes; discharge from metal refineries; Erosion of natural deposits
Chromium (ppb)-EPDS011	N	6.7	6.7-6.7	100	100	3/2017	Discharge from steel and pulp mills; Erosion of natural deposits
Fluoride (ppm)	N	0.46	0.46-0.46	4	4	3/2017	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and

							aluminum factories
Nitrate[2] (ppm)	N	0.89	0-0.89	10	10	3/2017	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)-EPDS011	N	130	130-130	N/A	N/A	3/2017	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.

Volatile Organic Chemicals (VOC)	**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**
Xylenes (ppm)-EPDS011	N	0.002	0-0.002	10	10	Qtrly 2017	Discharge from petroleum or chemical factories

Violation Summary (for MCL, MRDL, AL, TT, or Monitoring & Reporting Requirement)

Violation Type	**Explanation, Health Effects**	**Time Period**	**Corrective Actions**
Monitoring/reporting failure See Public Notice below for more details	The Monitoring Assistance Program (MAP) failed to take the an asbestos sample for Well Site 5	9 years	MAP began corrective actions to prevent these samples from being missed in the future.

TIER 3 PUBLIC NOTICE

IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Monitoring Requirements Not Met for Cottonwood Municipal Water System 13-025 Well Site 5

Our water system violated drinking water standards over the past year. Although this is not an emergency, as our customers, you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. Between 2009 to 2017 the third party sampler did not complete all required sampling for Asbestos and therefore cannot be sure of the quality of our drinking water during that time.

What should I do?
There is nothing you need to do at this time. If this was an emergency we would have informed you.

The table below lists the contaminant(s) we did not properly test for during the last year; how often we are supposed to sample and how many samples we are supposed to take; how many samples we took; when samples should have been taken; and the date on which follow-up samples were (or will be) taken.

Contaminant	Required sampling frequency	Number of samples taken	When sample should have been taken	When sample was taken
Asbestos	1 sample every 9 years	0	2009 to 2017	2018

Why did this happen?
The City of Cottonwood participates in the Monitoring Assistance Program which is a third party sampling program ran by the Arizona Department of Environmental Quality. Although the 13-025 water system is considered a medium sized system, we are not required, like small systems, to participate in the MAP program. However, due to the volume of sampling required the City has opted to participate. The MAP program failed to take an Asbestos sample at well site 5 between the years of 2009 to 2017. Asbestos has a 9-year monitoring period.
ADEQ has assured us that the MAP program has begun corrective actions to prevent these samples from being missed in the future.
Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.

For more information, please contact Roger Biggs –Utilities Manager at 928-634-0186 ext. 3307 or via email at rbiggs@cottonwoodaz.gov

Please share this information with other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

This notice is being sent to you by City of Cottonwood CW1
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