City of Willcox

Annual Drinking Water Quality Report 2019

We're pleased to provide you with this year's Annual Drinking Water Quality Report. The City of Willcox wants to keep you informed about the water quality and services we have delivered to you over the past year. Our goal is and always has been, provide to you a safe and dependable supply of drinking water. We have a source water protection plan available from our office that provides more information such as potential sources of contamination.

The Arizona Department of Environmental Quality (ADEQ) and The Environmental Protection Agency (EPA) requires the City of Willcox to regularly monitor and test the drinking water for contaminants. We take water samples in various locations for testing. We analyze the samples for such contaminants as coliform, nitrate/nitrite, and E. Coli. The City's water is tested rigorously to assure all state and federal drinking water requirements are met. We want our valued customers to be informed about their water utility. If you want to learn more, please contact Jeff Stoddard., Public Services and Works Co-Director at (520)384-6447.

WHERE DOES YOUR WATER COME FROM?

The City of Willcox has one drinking water source, an aquifer located deep underground at the base of the Circle I Hills. With three wells tapping into this aquifer, the City's demand for water is met. The aquifer is supplied by natural run-off from the surrounding mountains. The water, after being pumped from the aquifer, is then stored in a 1.5 million gallon tank located on "W" Mountain.

All the ground water is disinfected with chlorine prior to being introduced to the City's water system.

Willcox has an extensive Backflow Prevention Program which ensures the correct installation and maintenance of backflow devices at new connections to the water system. These backflow devices ensure that untreated water is not able to enter the City's water distribution system.

WATER QUALITY

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. Surface traveling water 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, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; inorganic contaminants, such as salts and metals, 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, 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, which are by products of industrial processes and petroleum production, can also come from gas stations, urban storm water runoff, and septic systems; radioactive contaminants can be naturally-occurring or be the result of oil and gas production and mining activities.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk. More information can be obtained by calling the US EPA's Safe Drinking Water Hotline at (800)426-4791.

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 regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptospoidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at (800)426-4791.

There were four (4) minor notices of violation due to report submissions being late to ADEQ. The 2nd and 3rd quarter MRDL reports were late a few days in submission, the June, 2019 Total Coliform sample results were late in submission to ADEQ and the August, 2019 were not received until a later date in 2020.

ADDITIONAL HEALTH INFORMATION

Arsenic - The City of Willcox tests the drinking water for arsenic. While your drinking water meets EPA's standard for arsenic, it does contain low levels. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Lead – 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. The City of Willcox is responsible for providing high quality 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 at (800)-426-4791 or at www.epa.gov/safewater/lead.

Nitrate – Nitrate in drinking water at levels above 10 ppm is a health risk for infants 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, you should ask for advice from your healthcare provider.

DEFINITIONS

Maximum Contaminant Level Goal (MCLG) - The goal is the level of a contaminant in drinking water below which there is no known or accepted risk to health. MCLG's allow or a margin of safety.

Maximum Contaminant Level—The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG feasible using the best available treatment technology. The Maximum Contaminant Level or MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Non-Detect (ND): Not detected in sample. **pCi/L** - Picocuries per liter is a measure of radioactivity in water

Parts per Billion (PPB): Or micrograms per liter (ug/L) **mg/L**—Milligrams per Liter **ug/L** Micrograms per liter

This report can also be locate on the City's web page at http://cityofwillcox.org

Well #1, #2, & #3

Single Point of Entry into the System

Contamination	Violation (Y/N)	Level Detected	Unit of Measure	MCLG	MCL	Likely Source of Contamination	Health Effects
1. Total Coliform	No			0	Presence of Coliform Bacteria in 5% monthly samples	Naturally present in environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially harmful bacteria may be present
2. Fecal Coliform and *E. Coli*	No			0	A routine sample and a repeat sample are total coliform positive and one is also Fecal Coliform or *E. Coli*	Human and fecal waste	Fecal coliforms and *E. Coli* are bacteria whose presence indicates the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children and other people with severely-compromised immune systems.
3. Nitrate plus Nitrite	No	1.45	mg/L			Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and “blue baby” syndrome.
4. Nitrogen as Nitrate	No	0.342	mg/L			Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and “blue baby” syndrome.
5. Arsenic	No	5.4	ug/L			Erosion from natural deposits; runoff from orchards; runoff from glass and electronic production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system and may have increased risk of getting cancer.
6. Lead	No	1.6	ug/L			Corrosion of household plumbing systems; erosion of natural deposits.	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight defects in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
7. Copper	No	0.0041	Mg/L			Corrosion of household plumbing systems; erosion of natural deposits.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s disease should consult their personal doctor.