

White Mountain Apache Tribe Utility Authority

Annual Drinking Water Quality Report

For Calendar Year 2019

Public Water Systems ID:

Miner Flat #090400693

Carrizo #090400244

Cibecue #090400243

Hondah-McNary #090400076

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact the White Mountain Apache Tribe Utility Authority (WMATUA) at (928) 338-4825 with any questions.

General Information

All 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>.

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 of 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).

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:** viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic Contaminants:** salts and metals, which 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, and 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.

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

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. The WMATUA 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. Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.

Arsenic in Drinking Water

While your drinking water meets the EPA standard for arsenic, it does contain low levels of arsenic. The EPA standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The 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.

Nitrate in Drinking Water

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, you should ask for advice from your health care provider.

Our Water Sources

The Miner Flat Public Water System (PWS), PWSID 090400693, is served by both ground water and surface water sources, which includes 13 wells and 1 surface water draw.

The Cibecue PWS, PWSID 090400243, is served by 3 ground water sources.

The Carrizo PWS, PWSID 090400244, is served by 1 ground water sources.

The Hondah-McNary PWS, PWSID 0400076, is served by 4 ground water sources.

WATER QUALITY TEST RESULTS

This section of the report contains the table with terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

ppm	Parts per million, or milligrams per liter (mg/L) – One part substance per million parts water.
ppb	Parts per billion, or microgram per liter (µg/L) – One part substance per billion parts water.
AL	Action level. The concentration of a contaminant, which if exceeded, triggers treatment or other requirements.
NA	Not applicable
ND	Not detected
TT	Treatment Technique. Required process intended to reduce the level of a contaminant in drinking water.
NTU	Nephelometric Turbidity Unit. A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
MCL	Maximum Contaminant Level. Highest allowable amount of a contaminant that is allowed in drinking water.
MCLG	Maximum Contaminant Level Goal. Level of a contaminant in drinking water below which no known or expected risk to health exists. MCLG's allow for a margin of safety
MNR	Monitored Not Regulated
mrem/yr	Millirem per year
	Positive samples/year, the number of positive samples taken that year
	Percent positive samples/month, the percent of samples taken monthly that were positive.

The tables below list all the drinking water contaminants detected during the 2019 calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the 2019 calendar year of the report. The EPA requires monitoring 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.

MINER FLAT PWSID 090400693								
Contaminants	Collection Date	Violation Yes/No	Level Detected	Range Detected	Units	MCLG	MCL	Likely Source of Contamination
Microbial Contaminants								
Total Coliform	2019	No	Negative	N/A	N/A	0	10 samples per month	Naturally present in environment
Fecal Coliform	2019	No	Negative	N/A	N/A	0		Human and animal waste
Turbidity	2019	No	0.10	0.03 – 0.37	NTU	N/A	1	Soil Runoff
Turbidity	2019	No	100%	N/A	NTU	N/A	< 0.3	Soil Runoff
Disinfection By-Products								
Five Haloacetic Acids (HAA5)	2019	No	23.8	11 – 43	ppb	N/A	60	By-products of drinking water disinfection
Total Trihalomethanes (TTHM)	2019	No	30.8	11 – 52	ppb	N/A	80	By-products of drinking water disinfection
Inorganic Contaminants								
Arsenic	2019	No	8.1	6.8 – 8.7	ppb	0	10	Erosion of natural deposits; Runoff from orchards; Glass and electronics production water
Sodium	2019	N/A	14	7.2 - 14	ppm	N/A	N/A	Erosion of natural deposits; Salt water intrusion
Stage 1 DBPR Pre-Treatment								
Alkalinity	2019	N/A	105.5	54 – 170	ppm	N/A	N/A	Dependent upon natural mineral content and pH
Total Organic Carbon (TOC)	2019	N/A	1.7	ND – 6.8	ppm	N/A	N/A	Naturally present in the environment
Total Organic Carbon (TOC)	2019	N/A	1.9	ND – 3	ppm	N/A	N/A	Naturally present in the environment

MINER FLAT PWSID 090400693								
Lead and Copper Rule								
Contaminants	Collection Date	Violation Yes/No	90 th percentile	# Sites over AL	Units	MCLG	AL	Likely Source of Contamination
Copper	2019	No	0.21	0	ppm	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2019	No	1.5	0	ppb	0	15	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

CIBECUE PWSID 090400243								
Contaminants	Collection Date	Violation Yes/No	Level Detected	Range Detected	Units	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
Barium	2019	No	0.055	N/A	ppm	2	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Sodium	2019	N/A	9.8	8 – 9.8	ppm	N/A	N/A	Erosion of natural deposits; Salt water intrusion
Lead and Copper Rule								
Contaminants	Collection Date	Violation Yes/No	90 th percentile	# Sites over AL	Units	MCLG	AL	Likely Source of Contamination
Copper	2019	No	0.11	0	ppm	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2019	No	1.3	0	ppb	0	15	Corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Microbial Contaminants								
Total Coliform	2019	No	Negative	N/A	N/A	0	2 samples per month	Naturally present in environment
Fecal Coliform	2019	No	Negative	N/A	N/A	0		Human and animal waste
Disinfection By-Products								
Five Haloacetic Acids (HAA5)	2019	No	2	N/A	ppb	N/A	60	By-products of drinking water disinfection
Total Trihalomethanes (TTHM)	2019	No	30	N/A	ppb	N/A	80	By-products of drinking water disinfection

CARRIZO PWSID 090400244								
Contaminants	Collection Date	Violation Yes/No	Level Detected	Range Detected	Units	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
Barium	2019	No	0.034	N/A	ppm	2	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride	2019	No	0.33	N/A	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Sodium	2019	N/A	51	24 - 51	ppm	N/A	N/A	Erosion of natural deposits; Salt water intrusion
Lead and Copper Rule								
Contaminants	Collection Date	Violation Yes/No	90 th percentile	# Sites over AL	Units	MCLG	AL	Likely Source of Contamination

	Date	Yes/No	percentile	over AL				
Copper	2019	No	0.32	0	ppm	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2019	No	ND	0	ppb	0	15	Corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Microbial Contaminants								
Total Coliform	2019	No	Negative	N/A	N/A	0	1 sample per month	Naturally present in environment
Fecal Coliform	2019	No	Negative	N/A	N/A	0		Human and animal waste

HONDAH-McNARY PWSID 090400076								
Contaminants	Collection Date	Violation Yes/No	Level Detected	Range Detected	Units	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants								
Arsenic	2019	No	2.6	N/A	ppb	0	10	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Barium	2019	No	0.38	N/A	ppm	2	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Nitrate (reported as Nitrogen)	2019	No	0.53	0.28 – 0.53	ppm	10	10	Runoff and leaching from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Sodium	2019	N/A	12	6.2 – 12	ppm	N/A	N/A	Erosion of natural deposits; Salt water intrusion
Lead and Copper Rule								
Contaminants	Collection Date	Violation Yes/No	90 th percentile	# Sites over AL	Units	MCLG	AL	Likely Source of Contamination
Copper	2019	No	0.027	0	ppm	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead	2019	No	0.58	0	ppb	0	15	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Microbial Contaminants								
Total Coliform	2019	No	Negative	N/A	N/A	0	2 samples per month	Naturally present in environment
Fecal Coliform	2019	No	Negative	N/A	N/A	0		Human and animal waste

Public Notice for Monitoring/Reporting and Other Violations

We are required to monitor 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. During the period covered by this report, we did not complete all monitoring or testing for the contaminants listed below, and therefore cannot be sure of the quality of your drinking water during that time. Violations which have not been returned to compliance will be repeated annually. The table below lists the contaminants we did not properly test for or other violations during the report period.

MINER FLAT PWSID 090400693

Contaminant Name	Type of Violation	Begin/End Date	Comments	Steps taken to Correct the Violation	Return to Compliance	Return Date	Action Comment
------------------	-------------------	----------------	----------	--------------------------------------	----------------------	-------------	----------------

Inorganics	Major Monitoring/reporting violation for routine chemical monitoring	1/1/2019 12/31/2019	Failed to monitor and/or report required monitoring results due annually	Reporting monitoring results as required			
------------	--	------------------------	--	--	--	--	--

What should I do, as a consumer?

There is nothing you need to do at this time

What is being done by the utility?

We will work with our regulatory official to conduct all required monitoring as directed

Water Conservation Guidelines

The average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day. There are many low-cost and no-cost ways to conserve water. Small changes can make a big difference! There are many ways in which you can help to conserve water. Guidelines and facts to save water include:

- Take short showers– a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install and can save up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- If you wash your dishes by hand, do not leave the water running for rinsing.
- Water plants only when necessary.
- The average car wash uses over 30 gallons of water.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing you have a leak. Fixing it or replacing with a new model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn and flowers are watered. Apply water only as fast as the soil can absorb it and only water during the coolest parts of the day to reduce evaporation.
- Teach your kids about water conservation to ensure future generations use water wisely.
- Visit www.epa.gov/watersense for more information

Reason for Water Quality Report

Federal law requires community water system operators to provide their customers an annual water quality report. The report helps people make informed choices about the water they drink. It lets people know what contaminants, if any, are in their drinking water and how these contaminants may affect their health. It also gives the system operators a chance to tell customers what it takes to deliver safe drinking water.

Contact Information

Please feel free to contact the numbers listed below if you would like more information about this report or for any questions related to your drinking water.



White Mountain Apache Tribe Utility Authority
 PO BOX 517, Whiteriver, AZ 85941
 1306 S. Industrial Park Road, Whiteriver, AZ 85941
 (928) 338-4825 Fax: (928) 338-3945

Alfred Walker, Acting Utility Director, (928) 338-4825, AlfredWalker@wmat.us