



Navajo Tribal Utility Authority®

An Enterprise of the Navajo Nation

2023 Annual Water Quality Report

Carson-Huerfano

Calendar Year 2023 - Public Water System ID# NN3503063

This report is a snapshot of your water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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. The Environmental Protection Agency (EPA) and 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 Water Drinking Hotline (800-426-4791).

Safe Drinking Water Act...

In 1996, the Safe Drinking Water Act (SDWA) was amended to ensure public water systems provide safe drinking water to the public and meet drinking water quality standards. The United States Environmental Protection Agency (USEPA) is governed to oversee states, localities, and water suppliers who implement these drinking water standards. Pursuant to SDWA, USEPA established maximum contaminant levels, maximum contaminant level goals, action levels, and treatment techniques to protect public health from drinking water contamination. NTUA is also regulated by the Navajo Nation Environmental Protection Agency (NNEPA) and must also comply with Navajo Nation Primary Drinking Water Regulations (NNP-DWR).

NOTE: Drinking water, including bottled water, may reasonably be expected to contain minimal concentrations of some contaminants. The presence of contaminants does not necessarily indicate the drinking water poses a health risk. Information about contaminants and potential health effects can be obtained from the USEPA Safe Drinking Water Hotline (1-800-426-4791) or online at <http://www.epa.gov/safewater>.

Consumer Confidence Report 2023.....

The Navajo Tribal Utility Authority (NTUA) operates and maintains the public water system within your Community. NTUA has created the Consumer Confidence Report to reassure our dedication and commitment in providing safe and quality potable water to you, our valued customer. Please take a few minutes to view this report and become familiar with your potable water.

The Consumer Confidence Report will provide valuable information about your potable water, such as, the type of water source, recent water quality detections, potential health effects, and governing drinking water standards and regulations. With water being an intricate part of our lifestyle, NTUA will continue to ensure the protection and quality of potable water served to your community.

Your Water Source.....

NTUA provides potable water from several different sources. The majority of communities receive their potable water from ground water. Ground water is pumped from wells, ranging from several feet to hundreds of feet in depth, and treated to become potable water. Some communities receive their potable water from streams and springs. Stream and spring water is treated, as if it were ground water, to become potable water. However, some communities receive their potable water from surface water, such as, the Animas River, the San Juan River, Farmington Lake, and Lake Powell. Surface water is pre-treated, filtered, and post-treated to become potable water.

General Information.....

It is important for you, our valued customer, to understand the potential occurrence and presence of contaminants within your potable water. As water flows on or beneath the surface of the earth, it dissolves naturally occurring minerals and pollutants produced from animal and/or human activity. These disturbed minerals and pollutants are called contaminants and could potentially be found in your potable water. Although, these contaminants may not necessarily pose a health risk to you, they may be of a particular risk to individuals with compromised immune systems. These individuals include persons diagnosed with cancer and undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune-deficiency disorders, and elderly and infants who may be prone to infection by these contaminants. These individuals should seek advice from their health care provider about consuming community potable water.

Why are there contaminants in my drinking water?

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (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 including:

- 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, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil & gas production, mining, or farming;
- pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater 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 stormwater runoff, and septic systems; and
- radioactive contaminants, which can be naturally-occurring or be the result of oil & gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit

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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.

Where does my water come from? Your water comes from 1 ground water source and 1 surface water source. One surface water source is purchased from Public Water System #NM3501124.

Water Quality Table.....

The table below lists all of the drinking water contaminants detected during the 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 calendar year of the report. The EPA or the State requires monitoring for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

2023 Water Quality Table from Carson Well – Ground Water Source

Contaminants	MRDLG	MRDL	Your Water	Range Low	Range High	Sample Date	MRDL Exceeded	Typical Source
<u>DISINFECTANTS</u>								
Chlorine	4	4	0.4679	0.12	1.01	2023	No	Drinking water additive used for disinfection
Units: Chlorine residual, ppm								
Contaminants	MCLG	MCL	Your Water	Range Low	Range High	Sample Date	Violation	Typical Source
<u>DISINFECTION BY-PRODUCTS</u>								
Five Haloacetic Acids (HAA5) Units: ppb	N/A	60	19	N/A	N/A	2023	No	By-product of drinking water chlorination
Total Trihalo-methanes (TTHMs) Units: ppb	N/A	80	61.1	N/A	N/A	2023	No	By-product of drinking water chlorination
<u>INORGANIC CONTAMINANTS</u>								
Barium Units: ppm	2	2	0.019	N/A	N/A	2020	No	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride Units: ppm	4	4	0.59	N/A	N/A	2020	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate [reported as Nitrogen] Units: ppm	10	10	0.3	N/A	N/A	2021	No	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium Units: ppb	50	50	5	N/A	N/A	2020	No	Petroleum, glass, metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; livestock lot runoff
Sodium Units: ppm	N/A	N/A	322	N/A	N/A	2020	No	Erosion of natural deposits; salt water intrusion
Contaminants	MCLG	Action Level	Your Water	Range	Sample Date	A.L. Exceeded	Typical Source	
<u>LEAD AND COPPER RULE</u>								
Copper Units: ppm - 90th Percentile	1.3	1.3	0.055	0 sites over Action Level	2021	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Copper Units: ppm - 90th Percentile	1.3	1.3	0.276	0 sites over Action Level	2021	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Copper Units: ppm - 90th Percentile	1.3	1.3	0.22	0 sites over Action Level	2021	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Lead Units: ppb - 90th Percentile	0	15	1	0 sites over Action Level	2021	No	Corrosion of household water plumbing systems; discharges from industrial maufactures; erosion of natural deposits.	
Lead Units: ppb - 90th Percentile	0	15	3	0 sites over Action Level	2021	No	Corrosion of household water plumbing systems; discharges from industrial maufactures; erosion of natural deposits.	

Special Education Statements - Additional Information for 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. This public water system 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 at 1-800-426-4791 or at <http://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water>.

Microbiological Testing

We are required to test your water regularly for signs of microbial contamination. Positive test results could lead to follow-up investigations called assessments and potentially the issuance of public health advisories. Assessments could lead to required corrective actions. The information below summarizes the results of those tests.

Calendar Year	Sampling Requirements	Sampling Conducted (months)	Total E. Coli Positive	Assessment Triggers	Assessments Conducted
2023	2 Samples due monthly	12 out of 12	0	0	0

Table Definitions

Term	Definition	Term	Definition	Term	Definition
AL	Action Level: The concentration of copper and lead in potable water which determines if treatment requirements are necessary for a public water system.	MCLG	Maximum Contaminant Level Goal: The maximum level of a contaminant in potable water at which no known or anticipated adverse health effect would occur, allowing for an adequate margin of safety.	N/A	Not applicable
LRAA	Locational Running Annual Average: the arithmetic average of analytical results for samples taken at a specific monitoring location during the previous four calendar quarters.	MRDL	Maximum Residual Disinfectant Level: 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.	ND	Not detected
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water which is delivered to any user of a public water system. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.	MRDLG	Maximum Residual Disinfectant Level Goal: The maximum level of a disinfectant in drinking water at which no known or anticipated adverse health effect would occur, allowing for an adequate margin of safety.	ppb	parts per billion: or microgram per liter (ug/L)
				positives samples:	the number of positive samples taken that year.
				% positive samples/month:	percent of samples taken monthly that were positive.
				TT	Treatment Technique: A required physical or chemical treatment process intended to reduce the level of a contaminant in potable water.
				90th Percentile:	Statistical value used to determine if Action Level is exceeded. Determined by calculating the value at which 90% of the samples tested were below that value.

2023 Water Quality Table – Cutter Water Treatment Plant Surface Water Source

Contaminants	MCLG or MRDLG	MCL TT, or MRDL	Detect in Your Water	Range Low High	Sample Date	Violation	Typical Source
DISINFECTIONS & DISINFECTION BY-PRODUCTS							
(There is onvincing evidence that addition of a disinfectant is necessary for control of microbiol contaminants)							
Chlorine (as Cl ₂) (ppm)	4	4	1.48 (avg)	0.67 2.0	2023	No	Water additive used to control microbes
INORGANIC CONTAMINANTS							
Barium Units: ppm	2	2	0.057	N/A	2023	No	Discharge of oil drilling wastes Discharge from metal refineries; erosion of natural deposits.
Fluoride Units: ppm	4	4	0.17	N/A	2023	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate [reported as Nitrogen] Units: ppm	10	10	0.16	N/A	2023	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
RADIOLOGICAL CONTAMINANTS							
Radium (combined 226/228 (pCi/L)	0	5	0.39	N/A	2021	No	Erosion of natural deposits
Contaminants	MCLG or MRDLG	MCL TT, or MRDL	Detect in Your Water	Range	Sample Date	Violation	Typical Source
MICROBIOLOGICAL CONTAMINANTS							
Turbidity (NTU)	NA	TT=1 NTU	Highest single Measurement 0.29 NTU	N/A	2023	No	Soil runoff
		TT=95% of samples/month ≤ 0.3 NTU	100% of the samples were below the TT value of 0.3 NTU				
Turbidity is a measurement of the cloudiness of the water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.							

How can I get involved?

Please feel free to contact the number provided below for more information.

Please share this information with all the 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.

For more information please contact

Raquel Whitehorse, Supervisor, Navajo Tribal Utility Authority Laboratory, PO Box 170, Fort Defiance, AZ 86504-0170, Phone: (928) 729-6239, Fax: (928) 729-6249.

Conserve Water at Home

- Turn taps off tightly so they do not drip.
- Use a cup instead of running the tap while brushing your teeth or shaving.
- Take shorter showers to reduce water use.
- Check all faucets, pipes, shower-heads and toilets for leaks. repair all leaks if found.
- Wash full loads of dishes and laundry.