



# 2022 Annual Water Quality Report

## Carson - Huerfano

Calendar Year 2022 - Public Water System ID#: 3503063

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.

### NTUA's Mission...

To provide safe, reliable and affordable utility services that exceed our customers' expectations.

### 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 (NNPDWR).

*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>.*

### For more information please contact . . .

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### Consumer Confidence Report 2022

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.

### 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).

## Cutter Water Treatment Plant

Contaminants	MCLG or MRDLG	MCL, TT, or MRDL	Detect in Your Water	Range Low High	Sample Date	Violation	Typical Source
<b>DISINFECTANTS &amp; DISINFECTION BY-PRODUCTS</b>							
(There is convincing evidence that addition of a disinfectant is necessary for control of control of microbial contaminants)							
Chlorine (as Cl <sub>2</sub> ) (ppm)	4	4	1.49 (Avg)	0.80 2.94	2022	No	Water additive used to control microbes
<b>INORGANIC CONTAMINANTS</b>							
Barium (ppm)	2	2	0.061	NA	2022	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.17	NA	2022	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
<b>RADIOLOGICAL CONTAMINANTS</b>							
Radium [combined 226/228] (pCi/L)	0	5	0.39	NA	2021	No	Erosion of Natural Deposits
<b>MICROBIOLOGICAL CONTAMINANTS</b>							
Turbidity (NTU)	NA	TT= 1 NTU	Highest single measurement: 0.31 NTU	NA	2022	No	Soil run off
		TT=95% of samples/month ≤ 0.3 NTU	99.9% 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.

### Important information about your drinking water

#### Monthly Reporting Requirements Not Being Met by the NGWSP Cutter Lateral Water System

Our water system recently violated a drinking water regulation. Although this is not an emergency, you, as our customer, have a right to know what happened, what you should do and what we did to correct this situation.

We are required to submit the lowest chlorine level for each day of operation to the New Mexico Environment Department (NMED) on or before the 10th of each month. This requirement was not met for the month of December 2022 due to administrative oversight.

**What does this mean?** This is not an emergency. If it had been, you would have been notified immediately. This violation was for an administrative oversight. It has no impact on the quality of the water our customers received. The water supply was treated properly, and there is no risk to public health.

**What should I do?** There is nothing you need to do at this time.

**What is being done?** We established a report tracking file to ensure all reporting requirements are met in the future.

**When was this issue resolved?** The system was notified by NMED on January 18, 2023, regarding the missing data. The data was submitted to NMED the same day.

**For more information,** please contact: Keaton Pippin at (928) 729-6593 or [keaton.pippin@jacobs.com](mailto:keaton.pippin@jacobs.com). This notice is being sent to you by The NGWSP Cutter Lateral Water System, NM3501124, 323 CR 7575, Bloomfield, NM 87413.

#### How can I get involved?

Please feel free to contact us at 928-729-6239 or on NTUA's web site [www.ntua.com](http://www.ntua.com) 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.\*

## 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 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.

### Table Definitions...

**Action Level (AL):** The concentration of copper and lead in potable water which determines if treatment requirements are necessary for a public water system.

**Maximum Contaminant Level (MCL):** The maximum permissible level of a contaminant in potable water which is delivered to any user of a public water system.

**Maximum Contaminant Level Goal (MCLG):** 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.

**Maximum Residual Disinfectant Level (MRDL):** The maximum permissible level of a disinfectant in potable water which is delivered to any user of a public water system.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The maximum level of a disinfectant in potable water at which no known or anticipated adverse health effect would occur, allowing for an adequate margin of safety.

**Treatment Technique (TT):** A required physical or chemical treatment process intended to reduce the level of a contaminant in potable water.

**Locational Running Annual Average (LRAA):** the arithmetic average of analytical results for samples taken at a specific monitoring location during the previous four calendar quarters.

## Definitions

### Term Definition

<b>ppb</b>	parts per billion, or microgram per liter (ug/L)
<b>positives samples</b>	the number of positive samples taken that year
<b>% positive samples/month</b>	percent of samples taken monthly that were positive
<b>ND</b>	Not detected
<b>N/A</b>	Not applicable
<b>MCLG</b>	Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
<b>MCL</b>	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
<b>MRDL</b>	Maximum Residual Disinfectant Level
<b>MRDLG</b>	Maximum Residual Disinfectant Level Goal
<b>TT</b>	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
<b>AL</b>	Action Level: The concentration of copper and lead in potable water which determines if treatment requirements are necessary for a public water system.
<b>90th Percentile</b>	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.

## Other Information

Cryptosporidium is a protozoan parasite that is common in surface waters. The oocyst is the transmission stage of the organism. Cryptosporidium is introduced into our source waters via wild animal populations. Although the organism is readily removed by the water treatment process utilized at the CLWTP, the oocyst is resistant to chemical disinfectants like chlorine and the primary reason to determine if additional treatment is required. Ingestion of Cryptosporidium may cause cryptosporidiosis, an abdominal infection.

In November 2020, the CLWTP began a two-year study to determine the average Cryptosporidium concentration in source water entering the facility. The first half of the sampling portion of the study was completed in October of 2022. The study was part of the requirements contained in the 2006 EPA Long-Term Enhanced Surface Water Treatment Rule.

Cryptosporidium was not detected in a single untreated water sample entering the CLWTP as of Oct of 2022.

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set by State and Federal regulations

## Where does my water come from?

Your water comes from 1 ground water sources and 1 surface water source.

Water from the San Juan River watershed in Colorado feeds into Navajo Reservoir via the San Juan River and its tributaries. A small portion of this water is then diverted to Cutter Reservoir to supply both the Navajo Indian Irrigation Project and the NGWSP Cutter Lateral. As part of the NGWSP, Cutter Reservoir water is discharged through Cutter Dam prior to being conveyed through a pipeline via pumping plants to the CLWTP, located southeast of Dzilth-Na-O-Dith-Hle or Huerfano Mesa for treatment to meet SDWA requirements.

## 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.

Carson - Huerfano Public Water System #NN3503063									
Contaminants	MRDLG	MRDL	Your Water	Range Low	Range High	Sample Date	MRDL Exceeded	Typical Source	
<b>DISINFECTANTS</b>									
Chlorine Units: Chlorine residual, ppm	4	4	0.5733	0.21	1.5	2022	No	Drinking water additive used for disinfection	
Contaminants	MCLG	MCL	Your Water	Range Low	Range High	Sample Date	Violation	Typical Source	
<b>DISINFECTION BY-PRODUCTS</b>									
Five Haloacetic Acids (HAA5) Units: ppb	N/A	60	22	N/A	N/A	2022	No	By-product of drinking water chlorination	
Total Trihalomethanes (TTHMs) Units: ppb	N/A	80	51.1	N/A	N/A	2022	No	By-product of drinking water chlorination	
<b>INORGANIC CONTAMINANTS</b>									
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	
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			322	N/A	N/A	2020	N/A	Erosion of natural deposits; salt water intrusion	
Contaminants	MCLG	Action Level	Your Water	Range	Sample Date	Action Level Exceeded	Typical Source		
<b>LEAD AND COPPER RULE</b>									
Copper - 90th Percentile, Units: ppb	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 - 90th Percentile, Units: ppb	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		
Lead - 90th Percentile, Units: ppb	0	15	1	0 sites over Action Level	2021	No	Corrosion of household water plumbing systems; discharges from industrial manufacturers; 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
2022	2 Samples due monthly	12 out of 12	0	0	0