



# Navajo Tribal Utility Authority

An Enterprise of the Navajo Nation

## 2019 Annual Water Quality Report

### Navajo, Fort Defiance, Window Rock, and Hunter's Point NTUA Annual Water Quality Report - Public Water System ID# NN0403000 Calendar Year 2019

#### This water quality report...

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).

#### Where does my water come from?

Your water comes from 17 ground water sources.

#### 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.

#### Consumer Confidence Report 2019

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.

#### NTUA's Mission...

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

#### 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.

#### 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>.

#### 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.

Sampling Requirements	Sampling Conducted (month)	Total E.Coli Positive	Assessment Triggers	Assessments Conducted
15 Samples due monthly	12 out of 12	0	1	1

During the year 2019 we were required to conduct One Level 1 Assessment. One Level 1 Assessment was completed.

#### Definitions:

**A Level 1 Assessment** is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Coliforms** are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

#### Water Quality Table

The following table 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.

# WATER QUALITY TABLE

**Fort Defiance, Hunter's Point, Navajo and Window Rock - Public Water System ID #: NN0403000**

Contaminants	MCLG	Your MCL	Range Water	Low	High	Date	Violation	Typical Source
<b>DISINFECTION BY-PRODUCTS</b>								
Five Haloacetic Acids (HAA5) Units: ppb	N/A	60	6.1	ND	7.3	2018	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHMs) Units: ppb	N/A	80	66.1	8.2	99.7	2019	No	By-product of drinking water chlorination
<b>INORGANIC CONTAMINANTS</b>								
Arsenic Units: ppb	0	10	7.8	7	7.8	2019	No	Erosion of natural deposits; runoff from orchards, glass and electronics production wastes
Barium Units: ppm	2	2	0.16	0.053	0.16	2019	No	Discharge of oil drilling waste and from metal refineries; erosion of natural deposits
Chromium Units: ppb	100	100	10	N/D	2	2019	No	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride Units: ppm	4	4	0.57	0.18	0.57	2017	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury Units: ppb	2	2	0.3	N/A	N/A	2019	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; run off from cropland
Nitrate [reported as Nitrogen] Units: ppm	10	10	1.2	ND	1.2	2019	No	Runoff and leaching from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium Units: ppb	50	50	15	ND	15	2019	No	Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff
Sodium Units: ppm			411	353	411	2019	N/A	Erosion of natural deposits; salt water intrusion
<b>RADIOLOGICAL CONTAMINANTS</b>								
Uranium (combined) Units: ppb	0	30	19.7	12.7	19.7	2019	No	Erosion of natural deposits

Contaminants	MCLG	Action Level	Your Water	Range	Sample Date	A.L. Exceeded	Typical Source
<b>LEAD AND COPPER RULE</b>							
Copper ppm - 90th Percentile	1.3	1.3	1.25	3 sites over Action Level	2019	No	Corrosion of household plumbing systems; Units: erosion of natural deposits; leaching from wood preservatives
Lead Units: ppb - 90th Percentile	0	15	2	0 sites over Action Level	2019	No	Corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Contaminant	Units	MRL	Amount Detected (avg.)	Range of Results	Sample Month	Year
<b>NN3500245</b>						
<b>Unregulated Contaminants Monitoring Rule (UCMR4):</b>						
Manganese	ppb	0.4	0.968	ND-0.968	October	2019
Bromochloroacetic acid	ppb	0.3	0.923	ND-0.923	October	2019
Bromodichloroacetic acid		0.5	0.987	ND-0.987	October	2019
Chlorodibromoacetic acid		0.3	0.981	ND-0.981	October	2019
Dibromoacetic acid	ppb	0.3	2.05	ND-2.05	October	2019
Dichloroacetic acid	ppb	0.2	0.402	ND-0.402	October	2019
Trichloroacetic acid	ppb	0.5	0.767	ND-0.767	October	2019
Bromide	ppb	20	1080	ND-1080	October	2019
TOC	ppb	1000	1900	ND-1900	October	2019

## Special Education Statements

### - Additional Information for Arsenic

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.

### - 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. PWS 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 <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>.

### Conserve Drinking Water . . .

Your help is needed to keep drinking water clean! Keep rivers, lakes and stream free of trash! Never allow oil or gasoline to be poured on the ground!

There is the same amount of water on Earth as there was when the dinosaurs lived. Since then, water has either relocated or is in another form such as liquid, solid or gas.

Today's concern is not running out of water because we will always have it. The CONCERN is PROTECTING the water from being contaminated!

Here's a FACT: What's dumped on the ground, poured down the drain, or tossed in the trash can pollute the sources of our drinking water.

**ACTION:** Take used motor oil and other automotive fluids to an automotive service center that recycles them. Patronize automotive centers and stores that accept batteries for recycling. Take leftover paint, solvents, and toxic household products to special collection centers. Remember let's do our part to protect our drinking water.

**For Additional Information . . .** About your public water system and potable water quality can be obtained from the NTUA Environmental Compliance and Laboratory Department.

NTUA Environmental Compliance & Laboratory Department, P.O. Box 170, Fort Defiance, Arizona 86504 or by phone (928) 729-6207. For Utility Outages or Emergencies, please call: 1-800-528-5011.

## Unit Definitions

Term	Definition
<b>ppm</b>	parts per million, or milligrams per liter (mg/L)
<b>ppb</b>	parts per billion, or microgram per liter (ug/L)
<b>positives samples/yr</b>	the number of positive samples taken that year
<b>% positive samples/month</b>	percent of samples taken monthly that were positive
<b>N/A</b>	Not applicable
<b>ND</b>	Not detected
<b>mrem/yr</b>	Millirem per year
<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>TT</b>	Treatment Technique: A required process in water.
<b>AL</b>	Action Level: The concentration of a contaminant which, if exceeded, trigger treatment or other requirements which a water system must follow.