



## North Table Mountain Water & Sanitation District

# REVISED 2021 ANNUAL DRINKING WATER QUALITY REPORT

*Public Water System Identification Number CO0130105*

**NORTH TABLE MOUNTAIN WATER & SANITATION DISTRICT (District)** is pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the exceptional water and services we deliver to you every day. Our goal is to provide you with a safe and dependable supply of drinking water. **We are pleased to report that our drinking water is safe and meets all Federal and State requirements.** Our water source is surface water that comes from Ralston Reservoir. If you have any questions about this report or concerning your water utility, please contact Bart Sperry at (303) 279-2854.

We want our valued customers to be informed about their water utility. If you want to learn more, please call the above contact about the utility or any scheduled public meetings. North Table Mountain Board of Directors meetings are open to the public and are held every second and fourth Tuesday of the month at the District office at 5:30 pm.

The District routinely monitors for constituents in your drinking water according to Federal and State laws. This report presents the results of our monitoring for the period of January 1, 2020 to December 31, 2020, unless otherwise noted. 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 [epa.gov/ground-water-and-drinking-water](http://epa.gov/ground-water-and-drinking-water). Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 Colorado Department of Public Health and Environment (CDPHE) has provided the District with a Source Water Assessment Report. This report is simply an indication of potential future risks associated with the source water supply and is designed to safeguard water resources from contamination. The results are NOT a reflection of the current quality of the untreated source water, nor are they a reflection of the quality of the treated drinking water that is supplied to District residents. This report is for source water used by North Table Mountain, Arvada, and Denver. Interested individuals should call the above contact, or view the report at: [www.colorado.gov/pacific/cdphe/swap-assessment-phase](http://www.colorado.gov/pacific/cdphe/swap-assessment-phase) (The report name begins with our public water system ID 130105). Potential sources of contamination in our source water area come from: EPA abandoned contaminated sites, EPA hazardous waste generators, EPA chemical inventory/storage sites, permitted wastewater discharge sites, aboveground, underground and leaking storage tank sites, solid waste sites, existing/abandoned mine sites and other facilities, low intensity residential, commercial/industrial/transportation, urban recreational grasses, quarries/strip mines/gravel pits, row crops, fallow, pasture/hay, forests, septic systems, and road miles.

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.

Compound	Sample Date	MCLG	MCL	Highest Level Found	Range	Violation	Source of Contamination
Total Coliform Bacteria	10 per month	0	Presence of Coliform Bacteria in one of the Monthly Samples	Absent in 100% of Samples Taken	NA	No	Naturally present in the environment
Maximum Residual Disinfectant Level	2020	4 ppm	4 ppm	RAA 1.0 ppm	0.3-1.5 ppm	No	Water additive used to control microbes
Total Organic Carbon	2020	NA	TT Minimum Ratio 1.0	Average 1.36 ppm	1.13 - 1.73 ppm	No	Naturally present in the environment
TTHM	2020	NA	80 ppb	HRAA 62.57 ppb	38.1 - 75.5 ppb	No	Byproduct of drinking water disinfection
HAA	2020	NA	60 ppb	HRAA 50.0 ppb	33.0 - 65.3 ppb	No	Byproduct of drinking water disinfection
Barium	2020	2 ppm	2 ppm	0.018 ppm	0.014 – 0.018 ppm	No	Discharge of drilling waste, discharge from metal refineries, erosion from natural deposits
Nitrate	2020	10 ppm	10 ppm	0.052 ppm	0.043 – 0.052 ppm	No	Runoff from fertilizer use, leaching from septic tanks, sewage, erosion of natural deposits
Nitrate-Nitrite	2020	1 ppm	1 ppm	<0.0040	NA	No	
Sodium	2020	NA	NA	12.0 ppm	8.0 – 12.0 ppm	No	Naturally present in the environment
Sulfate	2020	500 ppm	250 ppm SMCL	23.1 ppm	16.1 – 23.1 ppm	No	Naturally present in the environment
Fluoride	2020	4.0 ppm	4.0 ppm	0.12 ppm	0.1 – 0.12 ppm	No	Erosion of natural deposits
Gross Alpha	2020	0	15 pCi/L	0.8 pCi/L	ND – 0.8 pCi/L	No	Erosion of natural deposits
Combined Radium	2014	0	5 pCi/L	1.4 pCi/L	1.4 – 1.4 pCi/L	No	Erosion of natural deposits
Lead	2020	0 ppb	15 ppb Action Level	11 ppb	4.0 ppb 90 <sup>th</sup> percentile	No	Corrosion of household plumbing systems
Copper	2020	0 ppm	1.3 ppm Action Level	0.18 ppm	0.06 ppm 90 <sup>th</sup> percentile	No	Corrosion of household plumbing systems

**Summary of Turbidity Sampled at the Entry Point to the Distribution System**

Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources
Turbidity	Date/Mont: December	<u>Highest single</u> measurement: 0.13 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
Turbidity	Month: December	<u>Lowest monthly</u> percentage of samples meeting TT requirement for our technology: 100 %	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

**Turbidity** - Turbidity measurements indicate the clarity of the water. High levels of turbidity may interfere with disinfection. Samples must be less than or equal to 0.3 NTU in at least 95% of monthly samples. One hundred percent of the NTM samples taken were less than 0.3 NTU.

**Total Coliform Bacteria** - Presence of coliform bacteria is an indicator of pathogens (disease causing bacteria). One hundred percent of the District samples taken were absent (no coliform bacteria present).

**Maximum Residual Disinfectant Level (MRDL)** - 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. MRDL compliance is determined on a District-wide basis by calculating a running annual average of all sample times at all sample points.

**Total Organic Carbon (TOC)** - This constituent has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects. TOC compliance is determined by calculating a running annual average of all samples taken from the Water Treatment Plant's finished water, clearwell. The required removal ratio is 1.0.

**Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAAs)** - Total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include TTHMs and HAAs. Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer. TTHM and HAA compliance is determined on a District-wide basis by calculating a running annual average of all sample times at all sample points within the distribution system.

**Lead and Copper** - The listed results are from the 2020 monitoring program. Samples were taken at 20 customers homes. If the 90th percentile exceeds the action level, additional requirements would be triggered.

**Inorganic and Organic Chemical Contaminants and Radionuclides** - These contaminants are metals, salts, and other non-carbon based compounds, and synthetic and volatile organic compounds. All other regulated and unregulated contaminants were **not detected** in samples.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit 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 provide the same protection for public health. In this report you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided brief definitions.

- ppb - parts per billion or Micrograms per liter - corresponds to one penny in \$10,000,000 or one minute in 2,000 years.
- ppm - parts per million or Milligrams per liter - corresponds to one penny in \$10,000 or one minute in two years.
- NA - Not Applicable
- ND - Not Detected - laboratory analysis indicates that the constituent is not present.
- MCL - Maximum Contaminant Level - The "maximum allowed" is 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.
- RAA - Running Annual Average
- HRAA - Highest Running Annual Average
- LRAA - Lowest Running Annual Average
- SMCL - Secondary Maximum Contaminant Level is a recommended contaminant level and not enforceable.
- MCLG - Maximum Contaminant Level Goal - The "goal" is the highest level of a contaminant in drinking water, below which there is no known or expected risk to health. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- NTU - Nephelometric Turbidity Unit, measurement of the clarity of water.
- pCi/L - Picocuries per liter is a measure of radioactivity in water.
- Action Level - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements a water system must follow. The 90th percentile is the 18th highest result out of 20 samples taken.
- TT - Treatment Technique, a required process intended to reduce the level of a contaminant in drinking water.
- MRDLG - Maximum Residual Disinfectant Level Goal - The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- MPN - Most Probable Number of viable bacterial cells per 100 mL sample.
- u ohm/cm - A measure of the ability of a solution (water) to carry an electric current in micro ohms per cubic centimeter.
- grains/gallon - Grains per gallon is a unit of water hardness defined as 1 grain of calcium carbonate dissolved in 1 gallon of water. It translates into 1 part in about 58,000 parts of water or 17.1 parts per million.

**Additional Drinking Water Results and Ranges for 2020**

Inorganic Compound	MCL / SMCL	Average
Aluminum	0.200 ppm	0.123 ppm
Alkalinity (as CaCO3)	NA	26 ppm
Conductivity	NA	133.6 u ohm/cm
Hardness (as CaCO3)	NA	30 ppm or 1.7 grains/gal
Iron	0.30 ppm	0.03 ppm
pH	6.5- 8.5 Units	7.9 Units

The water in the District is considered soft. The American Water Works Association (AWWA) has set the following classifications for water hardness:

- Soft 0-60 ppm
- Moderately Hard 61-120 ppm
- Hard 121-180 ppm
- Very Hard Over 180 ppm



Contaminants that may be present in source water include:

- **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 and gas production, mining, or farming.
- **Pesticides and herbicides** that 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 byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.

Chemicals which were tested for, **but not detected** include:

- Antimony, arsenic, beryllium, cadmium, chromium, mercury, nickel, selenium, thallium, and all synthetic organic chemicals. The state has issued the District waivers for asbestos, cyanide, dioxin, glyphosate, and nitrite, due to non-detection or extremely low concentrations.

Arsenic is a naturally-occurring mineral known to cause cancer in humans at high concentrations. Arsenic levels above the new standard of 10 ppb warrant public concern. ***Arsenic is at less than detectable levels in NTM samples.***

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, and detected nitrate levels are above 5 ppm, you should ask for advice from your health care provider. For the District's nitrate/nitrite levels, refer to the Inorganic Chemical Contaminant table. ***Levels of nitrate/nitrite in the District are low.***

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 District 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead). For the District's lead levels, refer to the Lead and Copper table. ***Levels of lead in the District are low.***

Cryptosporidium (crypto) is a microscopic organism that, when ingested, can result in diarrhea, fever and other gastrointestinal symptoms. **The District has tested for crypto in both raw and treated water and has never detected it in either.** The organism is in many of Colorado's rivers and streams and comes from animal waste in the watershed. Crypto is eliminated by an effective treatment combination including filtration, sedimentation, and disinfection. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants are available from the Safe Drinking Water Hotline above. Please call our office at (303) 279-2854, if you have questions.

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