



We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources have been determined to be from groundwater sources. Our water sources are Bennett Springs, Virgil Peterson Springs, and Lower Bennett Springs. These sources are considered groundwater under the influence of surface water. One other water source new this year is the Wishing Well. This source is a ground water source. This is the source that we are currently using.

This report shows our water quality and what it means to you, our customer. If you have any questions about this report or concerning your water utility, please contact Angie Jones at 801-745-3420. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first and third Thursday of each month at 7:00 p.m.

SOURCE PROTECTION

The Drinking Water Source Protection Plan for Huntsville Town Water System is available for your review. It contains information about source protection zones, potential contamination sources and management strategies to protect our drinking water. Our sources are in a remote and protected areas and have a low level of susceptibility to potential contamination sources. We have also developed management strategies to further protect our sources from contamination. Please contact us if you have questions or concerns about our source protection plan.

PROTECTING THE QUALITY OF YOUR WATER

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. The unprotected lawn sprinkler system after you have fertilized or sprayed is also a cross connection. When the cross connection is allowed to exist at your home, it will affect you and your family first. If you'd like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

WATER QUALITY DATA AND INFORMATION

Huntsville Town Water System routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2021, along with the most recent monitoring from previous years. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It is important to remember that the presence of these constituents does not necessarily pose a health risk.

IMPOTANT DRINKING WATER DEFINITIONS

In the following table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we have provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

ND/Low - High - For water systems that have multiple sources of water, the Utah Division of Drinking Water has given water systems the option of listing the test results of the constituents in one table, instead of multiple tables. To accomplish this, the lowest and highest values detected in the multiple sources are recorded in the same space in the report table.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) or Micrograms per liter (ug/l) - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one

minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level (MCL) - The “Maximum Allowed” (MCL) 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.

Maximum Contaminant Level Goal (MCLG) - The “Goal” (MCLG) is 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.

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.

Maximum Residual Disinfectant Level Goal (MRDLG) - 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.

Date- Because of required sampling time frames i.e., yearly, 3 years, 4 years and 6 years, sampling dates may seem outdated.

Waivers (W)- Because some chemicals are not used or stored in areas around drinking water sources, some water systems have been given waivers that exempt them from having to take certain chemical samples, these waivers are also tied to Drinking Water Source Protection Plans.

Huntsville Town’s Water Quality Test Results							
Contaminant Name	Violation	Level Detected	Unit	MCLG	MCL	Date of Most Recent Sample	Likely Source of Contamination
		ND/Low-High					
Microbiological Contaminants							
Total Coliform Bacteria	N	ND	N/A	0	Presence of coliform bacteria in 5% of monthly samples	Monthly, throughout the year 2021	Naturally present in the environment
Fecal coliform and <i>E. coli</i>	N	ND	N/A	0	If a routine sample and repeat sample are total coliform positive, and one is also fecal coliform or <i>E. coli</i> positive	Monthly throughout the year 2021	Human and animal fecal waste
Turbidity for Surface Water	N	0.696	NTU	N/A	0.3 in at least 95% of the samples and must never exceed 3.0	Every 15 minutes daily 2021	Soil Runoff (Highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits)
Inorganic Contaminants							
Cadmium	N	0.208	ppb	5	5	2011	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Carbon, Total Organic (TOC)	N	ND	ppm	NA	TT	2021	Naturally present in the environment
Chromium	N	3.41	ppb	100	100	2011	Discharge from steel and pulp mills; erosion of natural deposits

Copper a. 90% results b. # of sites that exceed the AL	N	a. 805.084 b.0	ppb	1300	AL=1300	2019	Corrosion of household plumbing systems; erosion of natural deposits
Fluoride	N	128	ppb	4000	4000	2011	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead a. 90% results b. # of sites that exceed the AL	N	a. 1.037 b.0	ppb	0	AL=15	2019	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen)	N	ND	ppb	10000	10000	2021	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium	N	8	ppm	None set by EPA	None set by EPA	2011	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
Sulfate	N	9	ppm	1000	1000	2011	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
If the sulfate level of a public water system is greater than 500 ppm, the supplier must satisfactorily demonstrate that: a) no better water is available, and b) the water shall not be available for human consumption from commercial establishments. In no case shall water having a level above 1000 ppm be used.							
TDS (Total Dissolved solids)	N	228	ppm	2000	2000	2011	Erosion of natural deposits
If TDS is greater than 1000 ppm the supplier shall demonstrate to the Utah Drinking Water Board that no better water is available. The Board shall not allow the use of an inferior source of water if a better source is available.							
Disinfection By-products							
TTHM [Total trihalomethanes]	N	3.9	ppb	0	80	2021	By-product of drinking water disinfection
Haloacetic Acids	N	3.4	ppb	0	60	2021	By-product of drinking water disinfection
Chlorine	N	1228	ppb	4000	4000	2021	Water additive used to control microbes
Radioactive Contaminants							
Radium 228	N	0.31	pCi/1	0	5	2011	Erosion of natural deposits
Volatile Organic Contaminants							
Benzene	N	ND	ppb	0	5	2017	Discharge from factories; leaching from gas storage tanks and landfills
Carbon tetrachloride	N	ND	ppb	0	5	2017	Discharge from chemical plants and other industrial activities
Chlorobenzene	N	ND	ppb	100	100	2017	Discharge from chemical and agricultural chemical factories
o-Dichlorobenzene	N	ND	ppb	600	600	2017	Discharge from industrial chemical factories
p-Dichlorobenzene	N	ND	ppb	75	75	2017	Discharge from industrial chemical factories
1,2 - Dichloroethane	N	ND	ppb	0	5	2017	Discharge from industrial chemical factories
1,1 - Dichloroethylene	N	ND	ppb	7	7	2017	Discharge from industrial chemical factories
cis-1,2-ichloroethylene	N	ND	ppb	70	70	2017	Discharge from industrial chemical Factories

trans - 1,2 - Dichloroethylene	N	ND	ppb	100	100	2017	Discharge from industrial chemical factories
Dichloromethane	N	ND	ppb	0	5	2017	Discharge from pharmaceutical and chemical factories
1,2-Dichloropropane	N	ND	ppb	0	5	2017	Discharge from industrial chemical factories
Ethylbenzene	N	ND	ppb	700	700	2017	Discharge from petroleum refineries
Styrene	N	ND	ppb	100	100	2017	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene	N	ND	ppb	0	5	2017	Discharge from factories and dry cleaners.
1,2,4 - Trichlorobenzene	N	ND	ppb	70	70	2017	Discharge from textile-finishing factories
1,1,1 - Trichloroethane	N	ND	ppb	200	200	2017	Discharge from metal degreasing sites and other factories
1,1,2 - Trichloroethane	N	ND	ppb	3	5	2017	Discharge from industrial chemical factories
Trichloroethylene	N	ND	ppb	0	5	2017	Discharge from metal degreasing sites and other factories
Toluene	N	ND	ppb	1000	1000	2017	Discharge from petroleum factories
Vinyl Chloride	N	ND	ppb	0	2	2017	Leaching from PVC piping; discharge from plastics factories
Xylenes	N	ND	ppb	10000	10000	2017	Discharge from petroleum factories; discharge from chemical factories

CONTAMINANTS

Microbiological Contaminants:

Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Fecal coliform/E.coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Radioactive Contaminants:

Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Inorganic Contaminants:

Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

Carbon, Total Organic (TOC). Carbon, Total Organic (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (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 getting cancer.

Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's disease should consult their personal doctor.

Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Sodium. Sodium is an essential nutrient. However, some people who drink water containing sodium in excess of the MCL may experience health problems.

Sulfate. High levels of sulfates in the drinking water may cause some people to have stomach problems.

TDS (Total Dissolved Solids). TDS is an aesthetic water quality problem; however high levels may cause some people to experience health problems.

Volatile Organic Contaminants:

Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets and may have an increased risk of getting cancer.

Carbon Tetrachloride. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

Chlorobenzene. Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

o-Dichlorobenzene. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

1,2-Dichloroethane. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

1,1-Dichloroethylene. Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

cis-1,2-Dichloroethylene. Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

trans-1,2-Dichloroethylene. Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

Dichloromethane. Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

1,2-Dichloropropane. Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

Ethylbenzene. Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

Styrene. Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

Tetrachloroethylene. Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver and may have an increased risk of getting cancer.

1,2,4-Trichlorobenzene. Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.

1,1,1,-Trichloroethane. Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

1,1,2-Trichloroethane. Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Trichloroethylene. Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an

increased risk of getting cancer.

Toluene. Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

Vinyl Chloride. Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

Xylenes. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

IMPORTANT HEALTH INFORMATION

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. 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. Huntsville Town 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 or at <http://www.epa.gov/safewater/lead>.

All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or manmade. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials. 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 at 1-800-426-4791. MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

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 from infections. These people should seek advice from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline: 1-800- 426-4791. We at Huntsville Town Water System work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.