



# 2019 WATER QUALITY REPORT

## Draper City

### What's Inside?

- Protecting our Sources
- How You Can Help
- 2019 Water Quality Test Results
- Cross Connection

### Water Quality

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.



PSRT STD  
U.S. POSTAGE  
PAID BOUNTI-  
FUL, UT PERMIT  
NO. 1.

DRAPER CITY  
72 EAST SIVOGAH COURT  
DRAPER, UT 84020



# Draper City 2019 ANNUAL WATER QUALITY REPORT

## CUSTOMER SERVICE

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 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.

## JOIN US

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 Tuesday of each month at 7:00 PM.

## CONTACT

Chris Saylor  
Water Manager  
(801) 576 - 6385



## Your Drinking Water

Our water source has been determined to be from groundwater and surface water sources. We purchase water from Jordan Valley Water Conservancy District (#18027).

I'm pleased to report that our drinking water meets federal and state requirements. We at Draper City 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.

## Source Protection

The Drinking Water Source Protection Plan for Draper City 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 have been determined to have a low level of susceptibility from potential contamination. Please contact Jordan Valley Water Conservancy District if you have questions or concerns about their source protection plan.

## Cross Connection

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. Even that unprotected garden hose lying in the puddle next to the driveway is a cross connection. 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.

## Potential Health Risks Related to Drinking Water

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.

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 (800-426-4791).

## SAMPLE TABLE

Draper City 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, 2019. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk. As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

Contaminant	Violation Y/N	Level Detected ND/High-Low	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>Microbiological Contaminants</b>							
Total Coliform Bacteria	N	1	N/A	0	Presence of coliform bacteria in 5% of monthly samples	2019	Naturally present in the environment
Fecal Coliform and E. Coli	N	ND	N/A	N/A	5	2019	Human and animal fecal waste
Turbidity for Ground Water	N	0.2-0.5	NTU	N/A	5	2019	Soil runoff
Turbidity for Surface Water	N	ND-0.2	NTU	N/A	0.5 in at least 95% of the samples and must never exceed 5.0.	2019	Soil runoff (highest single measurement & the lowest monthly percentage of samples meeting the turbidity limits)
<b>Inorganic Contaminants</b>							
Antimony	N	ND	ppb	6	6	2019	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic	N	ND-2.4	ppb	0	10	2019	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	N	ND-76.0	ppb	2000	2000	2019	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium	N	ND	ppb	4	4	2019	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	N	ND-7.1	ppb	100	100	2019	Discharge from steel and pulp mills; erosion of natural deposits
Copper a. 90% results b. # of sites that exceed the AL	N	a. 0.365 b. 0	ppm	1.3	AL= 1.3	2019	Corrosion of household plumbing systems; erosion of natural deposits
Cyanide	N	ND-0.5	ppb	200	200	2019	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Fluoride	N	0.1-1.1	ppm	4	4	2019	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. 1.7 b. 1	ppb	0	AL=15	2019	Corrosion of household plumbing systems, erosion of natural deposits.
Nickel	N	ND-3.3	ppb	10000	10000	2019	Erosion of naturally occurring deposits
Nitrate (as Nitrogen)	N	ND-2.8	ppm	10	10	2019	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
Selenium	N	ND-2.4	ppb	50	50	2019	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N	10.3-74.2	ppm	None set by EPA	None set by EPA	2019	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills.
Sulfate	N	6-115	ppm	1000	1000	2019	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
TDS (Total Dissolved Solids)	N	ND	ppm	2000	2000	2019	Erosion of natural deposits
<b>Inorganic Contaminants</b>							
TTHM [Total Trihalomethanes]	N	26.1-54.1	ppb	0	80	2019	By-product of drinking water disinfection
Haloacetic Acids	N	12.1-37.4	ppb	0	60	2019	By-product of drinking water disinfection
<b>Radioactive Contaminants</b>							
Alpha Emitters	N	ND-14.0	pCi/L	0	15	2019	Erosion of natural deposits
Combined	N	ND-2.6	pCi/L	0	5	2019	Erosion of natural deposits
Radium 226	N	0.1-1.3	pCi/L	0	5	2019	Erosion of natural deposits
Radium 228	N	ND-1.3	pCi/L	0	5	2019	Erosion of natural deposits
Gross-Beta	N	1.2-32	pCi/L	0	50	2019	Decay of natural and manmade deposits
<b>Volatile Organic Contaminants (VOCs)</b>							
Chloroform	N	ND-61.6	ug/L	UR	NE	2019	By-product of drinking water disinfection
Chlorobenzene	N	ND	ppb	100	10	2019	Discharge from chemical and agricultural chemical factories
Bromoform	N	ND-2.7	ug/L	UR	NE	2019	By-product of drinking water disinfection
Dibromochloromethane	N	ND-4.4	ug/L	UR	NE	2019	By-product of drinking water disinfection
Bromodichloromethane	N	ND-14.4	ug/L	UR	NE	2019	By-product of drinking water disinfection
All Other Parameters	N	ND	ug/L	Various	Various	2018	Various Sources
<b>Pesticides/PCBs/SOCs</b>							
Bis (2ethylhexyl) phthalate	N	ND-0.8	ug/L	0	6.0	2019	Discharge from rubber and chemical factories
All other Parameters	N	ND	ug/L	Various	Various	2019	Various sources
<b>Organic Material</b>							
Total Organic Carbon	N	ND-3.1	mg/L	NE	TT	2019	Naturally occurring
Dissolved Organic Carbon	N	ND-2.3	ng/L	NE	UR	2019	Naturally occurring
UV-254	N	0.012-0.046	1/cm	NE	UR	2019	This is a measure of the concentration of UV-absorbing organic compounds; naturally occurring
<b>Secondary Inorganics</b>							
Aluminum	N	ND-60	ug/L	NE	SS=50-200	2019	Erosion of naturally occurring deposits and treatment residuals
Chloride	N	11-161	mg/L	NE	SS=250	2019	Erosion of naturally occurring deposits
Iron	N	ND-225.0	ug/L	NE	SS=300	2019	Erosion of naturally occurring deposits
Manganese	N	ND-34.0	ug/L	NE	SS=50	2019	Erosion of naturally occurring deposits
Odor	N	ND	TON	NE	SS=3	2019	Various sources
pH	N	6.8-8.4		NE	SS=6.5-8.4	2019	Erosion of naturally occurring deposits
Silver	N	ND	ug/L	NE	SS=100	2019	Erosion of naturally occurring deposits
Zinc	N	ND-10.0	ug/L	NE	SS=5000	2019	Erosion of naturally occurring deposits

#### 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. Draper City 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>.

#### Total Coliform Rule

The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system.

#### MCLs

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.

**TABLE CONTINUED...**

Contaminant	Violation Y/N	Level Detected ND/High-Low	Unit Measurement	MCLG	MCL	Date Sampled	Likely Source of Contamination
<b>Unregulated Contaminants</b>							
Alkalinity, Bicarbonate	N	25-225	mg/L	NE	UR	2019	Naturally Occurring
Alkalinity, Carbonate	N	ND-4.8	mg/L	NE	UR	2019	Naturally Occurring
Alkalinity, CO2	N	28-200	mg/L	NE	UR	2019	Naturally Occurring
Alkalinity, Hydroxide	N	ND	mg/L	NE	UR	2019	Naturally Occurring
Alkalinity, Total (CaCO3)	N	22-225	mg/L	NE	UR	2019	Naturally Occurring
Ammonia	N	ND-0.30	mg/L	NE	UR	2018	Runoff from fertilizer and naturally occurring
Bromide	N	ND-16.9	ug/L	NE	UR	2019	Naturally Occurring
Boron	N	39	ug/L	NE	UR	2018	Erosion of naturally occurring deposits
Calcium	N	26.1-74.9	mg/L	NE	UR	2019	Erosion of naturally occurring deposits
Chemical Oxygen Demand	N	ND-18.0	mg/L	NE	UR	2014	Measures amount of organic compounds in the water; Naturally occurring
Chloropicrin	N	ND	ug/L	NE	UR	2014	Antimicrobial fungicide chemical compound
Cobalt	N	ND	mg/L	NE	UR	2018	Erosion of naturally occurring deposits
Conductance	N	45-1100.00	Umhos/cm	NE	UR	2019	Naturally Occurring
Cyanide, Total	N	ND-19	ug/L	NE	UR	2019	Discharge from steel/metal factories; discharge from plastic fertilizer factories
Dioxin	N	ND	pg/L	NE	UR	2009	Industrial discharge from factories
Geosmin	N	ND-6.8	ng/L	NE	UR	2019	Naturally occurring organic compound associated with musty odor
Hardness, Calcium	N	ND-19	mg/L	NE	UR	2019	Erosion of naturally occurring deposits
Hardness, Total	N	93.6-357.0	mg/L	NE	UR	2019	Erosion of naturally occurring deposits
Chromium VI	N	ND	mg/L	NE	ur	2011	Industrial runoff and naturally occurring
Magnesium	N	6.9-41.3	mg/L	NE	UR	2019	Erosion of naturally occurring deposits
Molybdenum	N	ND-2.3	ug/L	NE	UR	2019	By-product of copper and tungsten mining
Oil & Grease	N	ND-19	mg/L	NE	UR	2016	Petroleum hydrocarbons can either occur from natural underground deposits or from manmade lubricants
Orthophosphates	N	ND	ug/L	NE	UR	2019	Erosion of naturally occurring deposits
Potassium	N	ND-2.7	mg/L	NE	UR	2019	Erosion of naturally occurring deposits
Silica (Silicon Dioxide)	N	6.6-8.1	mg/L	NE	UR	2018	Erosion of naturally occurring deposits
TSS (Total Suspended Solids)	N	ND	mg/L	NE	UR	2019	Erosion of naturally occurring deposits
Turbidity (Distribution System)	N	0.1-0.5	mg/L	NE	UR	2019	Suspended material from soil runoff
Vanadium	N	ND-2.2	ug/L	NE	UR	2019	Naturally Occurring

<b>Unregulated Contaminants</b>							
Manganese	N	ND-4.1	ug/L	NE	UR	2019	The unregulated Contaminant Monitoring Rule (UCMR) is a monitoring program mandated by EPA. It requires public water systems to monitor various sites every three (3) years for different parameters selected by EPA. This rule collects occurrence data on parameters that already have an MCL but would like to know the occurrence of it at significantly lower levels than the current analytical method allows. These numbers represent samples taken during the monitoring period which began in 2019.
HAA5	N	2.2-39.6	ug/L	NE	uR	2019	
HAA6Br	N	2.2-9.0	ug/L	NE	uR	2019	
HAA9	N	4.1-47.5	ug/L	NE	UR	2019	
Alpha-BHC	N	ND	ug/L	NE	UR	2019	
Chlorpyrifos	N	ND	ug/L	NE	UR	2019	
Dimethipin	N	ND	ug/L	NE	UR	2019	
Ethoprop	N	ND	ug/L	NE	UR	2019	
Merphos-Oxone	N	ND	ug/L	NE	UR	2019	
Oxyfluorfen	N	ND	ug/L	NE	UR	2019	
Permethrin	N	ND	ug/L	NE	UR	2019	
Profenofos	N	ND	ug/L	NE	UR	2019	
Tebuconazole	N	ND	ug/L	NE	UR	2019	
Butylated Hydroxyanisole	N	ND	ug/L	NE	UR	2019	
Quinoline	N	ND	ug/L	NE	UR	2019	
O-Toluidine	N	ND	ug/L	NE	UR	2019	
N-Butanol	N	ND	ug/L	NE	UR	2019	
2-Methoxyethanol	N	ND	ug/L	NE	UR	2019	
2-Propen-1 ol (Ally Alcohol)	N	ND	ug/L	NE	UR	2019	
Germanium	N	ND	ug/L	NE	UR	2019	

**TABLE 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've 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.

<b>SIGNIFICANT DEFICIENCY</b>		
Quote SIG from IPS	Survey Date	Action Plan
PS15- "Pump Station has cross connection or is subject to contamination" Suncrest Pump Station #3	05/16/2019	Draper City is working with the Division of Drinking Water to ensure any identified cross connections or confirmation sources are resolved to protect the pump station facility. Our plan is to review the facility cooling equipment identified in the investigation, determine any potential contamination source, and modify the system to prevent contamination, through equipment modification.
PS15- "Pump Station has cross connection or is subject to contamination" Suncrest Pump Station #4	05/16/2019	Draper City is working with the Division of Drinking Water to ensure any identified cross connections or confirmation sources are resolved to protect the pump station facility. Our plan is to review the facility cooling equipment identified in the investigation, determine any potential contamination source, and modify the system to prevent contamination, through equipment modification.