

# Annual Drinking Water Quality Report -2018-

Heber City Municipal Water System  
749 West 300 South  
Heber City, Utah 84032

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. Heber City's water supply is extracted and stored exclusively from the northeastern quadrant of the community, which is on the easternmost fringe of the Great Basin Carbonate and Alluvial Aquifer System (GBCAAS). All of the City's culinary water supply is derived from ground water sources at three (3) locations: Broadhead Spring & Well, Hospital Well, and Valley Hills Well Pump Facilities, and from there it is distributed to three (3) individual pressure zones within Heber City.

## **SOURCE PROTECTION PLAN**

The Drinking Water Source Protection Plan for the Heber City Municipal Water Supply is available for your review. It contains information about source protection zones, potential contamination sources, and management strategies to protect our drinking water. Heber Valley's appeal and popularity, continue to make it one of the fastest growing micropolitan areas in the United States. As the surrounding undeveloped and previously non-sewered agricultural areas rapidly succumb to publicly sewer-served residential development, the potential threat of drinking water source contamination has been significantly reduced. Since Heber City's commercial and industrial growth has been primarily zoned and remotely located down-gradient from the City's water production and storage facilities, Heber City's mandated Wellhead Protection Program has been effectively instituted, thereby effectively reducing the potential threat from commercial and industrial development to the quality of the community's water supply. We have also developed management strategies to further protect our sources from contamination. Please contact Heber City's Engineering Department (435) 654-6382, located at 75 North Main Street in Heber City Hall, if you have questions, concerns, or wish to obtain a copy of our source protection plan.

## **CROSS CONNECTION CONTROL**

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are extremely 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 allow polluted water or chemicals to migrate into the water supply system, when not properly protected. This not only compromises the water quality, but it can also affect your health.

So, what can you do? Do not make or allow improper connections between drinking water and non-drinking water supply lines at your homes. Even an unprotected garden hose, lying a puddle next to the driveway, creates a cross connection. The unprotected lawn sprinkler system, after you have fertilized or sprayed, is also a cross connection. When such a cross connection is allowed to exist at your home it will affect you and your family first. If you would like to learn more about helping to protect the quality of our water, please contact Public Works at (435) 654-3275, for further information about different ways you can help protect our water. Heber City's ongoing water service replacement and meter vault upgrade program, funded by monthly water usage fees, is serving to dramatically limit the potential of cross connection contamination with the installation of State of Utah certified backflow prevention hardware.

## **WATER SYSTEM UPGRADES FOR 2018**

All Utah community water production, storage, and distribution facilities are inspected every three (3) years by State authorized and certified inspectors, relative to a number of established health and welfare criteria, contained within what is more commonly referred to as a Sanitary Survey. These specific criteria monitor Heber City Public Works' accountability for safeguarding the Community's water system from the potential of unauthorized access, or any intentional or inadvertent contamination of the Community's water supply. Any observed shortcomings or compromises within the system are specifically referred to as significant deficiencies within the survey. These deficiencies would then be assigned a point value, based upon the threat that each criteria potentially poses to the consumer, should the integrity of the system remain compromised and left unresolved beyond a reasonable timeframe. During 2018, the Public Works

water distribution system administration has focused their efforts on improving water quality, conservation, and system hydraulics by replacing failing and undersized water mains in Old Town Heber, principally along 600 South, between 300 West and 600 West. As water conservation becomes an ever more important issue, Public Works has adopted an innovative LTE (cellular-read) metering technology to be installed on every new service, or when replacing the existing Orion (radio-read) meter electronics, which may have begun to fail due to age or damage. When installed, the new LTE meter electronics allow homeowners to access their own minute-by-minute water usage data, and to setup personalized email, text message, or mobile alert usage alarms via the “EyeOnWater” mobile app, or the [eyeonwater.com](http://eyeonwater.com) website. The complete system conversion will take place over the course of a few years, and we are excited about the benefits of this powerful tool for residents of Heber City to take advantage of, as it becomes available to them. Public Works has also remained focused on the reconfiguration of pressure zones within its water distribution system for the purpose of improving fire protection and eliminating marginally pressured water services in elevated areas, readily susceptible to backflow and cross connection conditions, which can compromise water quality and endanger water users throughout the water distribution system. Water conservation and distribution system loss auditing protocols continue to be implemented in conjunction with on-going distribution system repairs, replacement, and upgrades; these upgrades have been proven to pay dividends demonstrated by reduced utility billing costs and water consumption demographics resembling those of more than a decade ago, despite population numbers which are twice that of ten (10) years ago. We are pleased to report that our drinking water continues to meet all federal and state requirements.

## QUESTIONS

This report shows our water quality and what it means to you, our customer. If you have any questions about this report or questions concerning your water utility, please contact your Heber City Public Works Department at (435) 654-3275, located at 749 West 300 South.

## PLEASE ATTEND

We welcome and encourage our valued customers to become informed about their water utility! If you want to learn more, please attend any of our regularly scheduled Heber City Council meetings. Meetings are typically held at 6:00 PM on the 1<sup>st</sup> and 3<sup>rd</sup> Tuesday of each month, upstairs in the Heber City Hall Council Chambers. For an updated schedule, please visit: <https://heberut.gov/>

The Heber City Public Works Department routinely monitors its municipal water supply for contaminants in our drinking water in accordance with all Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2018 or the most recent sample data. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk.

## CONTAMINANT TABLE DEFINITIONS

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

**Non-Detects (ND)** - Laboratory analysis indicates that the contaminant 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 contaminants 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 some other form of removal.

**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.

**Date**- Because of required sampling time frames and frequencies mandated by EPA, DEQ and the Utah Division of Drinking Water, 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.

## **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. Heber City Public Works Department 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>.

## **SAFE WATER**

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 contaminants have been detected. The EPA has determined that your water IS SAFE at these levels.

All sources of drinking water are subject to potential contamination by contaminants that are naturally occurring or are man-made. Those contaminants 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 or Maximum Contaminant Levels as they are known, are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

**Nitrates:** As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

**Lead:** Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium, giardia, and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We at Heber City Public Works Department 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 Water Information

Source Water Name	Type Of Water	Source ID
BROADHEAD SPRING	GW	WS001
BROADHEAD WELL	GW	WS003
VALLEY HILLS WELL	GW	WS004
HOSPITAL WELL	GW	WS005

## TCR Tables

Coliform Bacteria	Year Sampled	+ Sample Count	MCLG	MCL	Violation	Likely Source of Contamination
Coliform Bacteria	2018	None Sampled	0	5	N	Naturally present in the environment.

## Lead And Copper

	Year Sampled	MCLG	Action Level (AL)	90% tiles	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	1.17	1	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	15	3.8	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

## Regulated Contaminants

Disinfectants and Disinfection By-Products	Year Sampled	Lowest Level	Highest Level	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids	2018	0	2.6	0	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes	2018	3.9	10	0	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Year Sampled	Lowest Level	Highest Level	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2017	1.9	1.9	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2017	0.263	0.263	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2017	0.142	0.142	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	2018	0.746	1.877	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

## DEQ | Drinking Water

Sodium	2017	7.904	7.904	500	None	ppm	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sulfate	2017	10.052	10.052	1000	1000	ppm	N	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills, runoff from cropland
Total Dissolved Solids (TDS)	2017	248	248	2000	2000	ppm	N	Erosion of natural deposits

Lead and Copper	Year Sampled	Lowest Level	Highest Level	MCLG	MCL	Units	Violation	Likely Source of Contamination
Copper	2016	0.123	1.51	1.3	1.3	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016	0	8.4	0	15	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Radioactive Contaminants	Year Sampled	Lowest Level	Highest Level	MCLG	MCL	Units	Violation	Likely Source of Contamination
Alpha emitters	2014, 2017	0	1	0	15	pCi/L	N	Erosion of natural deposits.
Radium 228	2014, 2017	-0.22	0.42	0	5	pCi/L	N	Erosion of natural deposits.

Turbidity	Year Sampled	Lowest Level	Highest Level	MCLG	MCL	Units	Violation	Likely Source of Contamination
Turbidity	2017	1.27	1.27	0	0.3	NTU	N	Soil runoff.