

Water Quality Report

Mutton Hollow Improvement District

UTAH060070

CALENDAR YEAR 2020

We're 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 are committed to ensuring the quality of your water. Our water is purchased from Weber Basin Water Conservancy District (WBWCD) UTAH290223. WBWCD treats all water used by Mutton Hollow Improvement District (MHID). MHID only provides storage and distribution of the water provided by WBWCD.

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.

We are pleased to report that our drinking water meets federal and state requirements.

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 **Mark Pinnau at 385-424-7646** . 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 4th Thursday of February, April, June, August, October and December at 8:00 PM. The meetings are held in the home of Chairman Justin Logan, at 203 East 950 North Kaysville Utah.**

MHID routinely monitors for constituents in our drinking water in accordance with the Federal and Utah State laws. The following table shows the results of monitoring water for the period of January 1st to December 31st, 2020. 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.

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 out-dated.

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.

The data provided below has been provided by WBWCD.

WATER QUALITY DATA AND INFORMATION

The water treated and provided by Weber Basin Water Conservancy District meets and exceeds all state and federal regulations for water

Information on the following page lists all regulated and unregulated drinking water contaminants that we have detected during this year and the recent past. We test for over 130 contaminants with almost all being non-detectable. Unregulated contaminant monitoring helps the EPA determine where certain contaminants occur and whether these contaminants need to be regulated. Some of our data, though representative, are less recent because the contaminant levels are stable and require less frequent monitoring. It is important to know that the presence of contaminants in the water does not necessarily indicate that the water poses a health risk. The detected contaminants tables have been divided into three groups representing the District's three culinary distribution systems. These systems are:

- ◆ Weber Basin NORTH (covers the area north of Ogden City)
- ◆ Weber Basin CENTRAL (the area from Ogden City south to Farmington)
- ◆ Weber Basin SOUTH (the area from Centerville to North Salt Lake)

DRINKING WATER TESTING RELATED DEFINITIONS

Detected Contaminant - Any contaminant detected at or above its method detection limit (MDL)
MDL - Method Detection Limit (The lowest level at which a contaminant is detected with a specified degree of certainty by an analytical method used to analyze samples)
MCL - Maximum Contaminant Level (The highest level of a contaminant that is allowed in drinking water)
MCLG - 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)
LRAA – Locational Running Annual Average
NA - Not Applicable (there is no Federal or State MCL and/or MCLG)
ND - Not Detected
NTU - Nephelometric Turbidity Unit (a measure of the cloudiness of the water)
ppm - parts per million; equivalent to milligrams per liter (mg/L)
ppb - parts per billion; equivalent to micrograms per liter (µg/L)
pCi/L - picocuries per liter (a measure of radioactivity)

REGULATED MICROBIOLOGICAL CONTAMINANTS

Weber Basin CENTRAL - These data are derived from continuous measuring data collected in 2020.						
Contaminants	Percent of Time Meeting below the MCL Monthly	Highest Single Measurement	MCL	MCLG	Violation	Typical Source
Turbidity – Weber South WTP	100%	0.07 NTU	0.3 NTU	0 NTU	No	Soil runoff
Turbidity – Davis North WTP	100%	0.08 NTU	0.3 NTU	0 NTU	No	Soil runoff
Weber Basin SOUTH - These data are derived from continuous measuring data collected in 2020.						
Contaminants	Percent of Time Meeting below the MCL Monthly	Highest Single Measurement	MCL	MCLG	Violation	Typical Source
Turbidity – Davis South WTP	100%	0.12 NTU	0.3 NTU	0 NTU	No	Soil runoff

Note: Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

MICROBIOLOGICAL PARAMETERS

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that potentially harmful bacteria may be present. Utah DDW regulations require the District to test a minimum of 120 samples per month for total coliform and E. coli. If more than 5% of monthly samples collected are positive for total coliform, a violation of the MCL has occurred. In 2020, the District did not exceed the monthly MCL for total coliform bacteria; in fact, this has never occurred in our water since this rule was established.

pg. 8 *Weber Basin Water Conservancy District 2020 Annual Consumer Confidence Report*

REGULATED INORGANIC CONTAMINANTS

Weber Basin NORTH - These data are derived from sample collected from 2010 through 2019.

Contaminants (units)	Average	Lowest	Highest	MCL	MCLG	Violation	Typical Source
Arsenic (ppb)	0.800	0.600	1.20	10	NA	No	Erosion of natural deposits; runoff from orchards
Barium (ppm)	0.117	0.0330	0.267	2	2	No	Erosion of natural deposits; discharge of drilling wastes
Fluoride ^{3,5} (ppm)	0.100	ND	0.200	4	4	No	Erosion of natural deposits
Nitrate (ppm)	1.40	0.988	1.81	10	10	No	Runoff from fertilizer use; erosion of natural deposits
Selenium (ppb)	1.10	ND	2.10	50	50	No	Erosion of natural deposits; discharge from mines
Sodium (ppm)	16.5	13.4	19.6	NA ¹	NA	NA	Erosion of natural deposits
Sulfate (ppm)	11.9	5.00	25.0	1,000 ²	NA	No	Erosion of natural deposits
Total Dissolved Solids (ppm)	214	136	315	2,000 ²	NA	No	Erosion of natural deposits

Weber Basin CENTRAL - These data are derived from samples collected from 2017 through 2019 (except the Fluoride and Nitrate data, which also include 2020 data).

Contaminants (units)	Average	Lowest	Highest	MCL	MCLG	Violation	Typical Source
Arsenic (ppb)	0.433	ND	1.30	10	NA	No	Erosion of natural deposits; runoff from orchards
Barium (ppm)	0.121	0.0910	0.179	2	2	No	Erosion of natural deposits; discharge of drilling wastes
Fluoride ^{4,5} (ppm)	0.649	0.0830	1.50	4	4	No	Erosion of natural deposits
Nitrate (ppm)	0.559	ND	1.80	10	10	No	Runoff from fertilizer use; erosion of natural deposits
Selenium (ppb)	0.433	ND	0.700	50	50	No	Erosion of natural deposits; discharge from mines
Sodium (ppm)	36.3	22.5	47.1	NA ¹	NA	NA	Erosion of natural deposits
Sulfate (ppm)	26.7	7.00	42.0	1,000 ²	NA	No	Erosion of natural deposits
Total Dissolved Solids (ppm)	382	352	412	2,000 ²	NA	No	Erosion of natural deposits

Weber Basin SOUTH - This data is derived from samples collected from 2017 through 2019 (except the Fluoride and Nitrate data, which also include 2020 data).

Contaminants (units)	Average	Lowest	Highest	MCL	MCLG	Violation	Typical Source
Barium (ppm)	0.104	0.0660	0.145	2	2	No	Erosion of natural deposits; discharge of drilling wastes
Cyanide (ppb)	1.33	ND	4.00	200	200	No	Discharge from steel, metal, plastic, and fertilizer factories
Fluoride ⁴ (ppm)	0.700	0.113	1.88	4	4	No	Erosion of natural deposits
Nitrate (ppm)	0.816	0.205	3.02	10	10	No	Runoff from fertilizer use; erosion of natural deposits
Selenium (ppb)	1.23	1.10	1.30	50	50	No	Erosion of natural deposits; discharge from mines
Sodium (ppm)	61.6	35.6	92.1	NA ¹	NA	NA	Erosion of natural deposits
Sulfate (ppm)	37.7	29.0	44.0	1,000 ²	NA	No	Erosion of natural deposits
Total Dissolved Solids (ppm)	735	488	988	2,000 ²	NA	No	Erosion of natural deposits

- 1) The State of Utah Requires monitoring for sodium even though no MCL has been established.
- 2) The MCL for sulfate and total dissolved solids is established by the State of Utah.
- 3) This value represents naturally occurring fluoride concentrations.
- 4) Fluoride levels in Davis County have been adjusted to an optimal level of 0.7 ppm.
- 5) **The District does not add fluoride to water delivered to Weber County.**

REGULATED RADIOACTIVE CONTAMINANTS

Weber Basin CENTRAL - These data are derived from samples collected from 2016 through 2020.

Contaminant	Average	Lowest	Highest	MCL	MCLG	Violation	Typical Source
Gross Alpha Particles (pCi/L)	1.10	0.200	2.60	15	0	No	Erosion of natural deposits
Gross Beta Particles (pCi/L)	2.62	1.90	4.40	50	0	No	Decay of natural & man-made deposits
Radium-228 (pCi/L)	0.808	0.380	1.70	5	0	No	Erosion of natural deposits

Weber Basin SOUTH - These data are derived from samples collected from 2015 through 2018.

Contaminant	Average	Lowest	Highest	MCL	MCLG	Violation	Typical Source
Gross Alpha Particles (pCi/L)	3.58	1.20	5.60	15	0	No	Erosion of natural deposits
Gross Beta Particles (pCi/L)	5.78	3.50	7.00	50	0	No	Decay of natural & man-made deposits
Radium-228 (pCi/L)	0.425	0.340	0.580	5	0	No	Erosion of natural deposits

OTHER POSSIBLE CONTAMINANTS TO CONSIDER

Cryptosporidium

Cryptosporidium and giardia are microbial pathogens found in surface water throughout the U.S. Although filtration removes cryptosporidium and giardia, the most commonly used filtration methods cannot guarantee 100 percent removal. Monitoring conducted by the District indicates the presence of cryptosporidium and giardia in our source water. The District uses UV light in our water treatment which inhibits these organisms from reproducing and causing sickness. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Radon

Radon is a radioactive gas that you cannot see, taste, or smell. At this time, radon monitoring is not required by the EPA; however, the EPA is considering making radon monitoring a requirement. The proposed MCL for radon is 4,000 pCi/L for systems which have a public education program for radon. For additional information, call your state radon program or call EPA's Radon Hotline (1-800-SOS-RADON).

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. 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 or at www.epa.gov/safewater/lead.

During September 2020, MHID took lead samples from 20 residences within the District. Three of them had elevated levels of lead. The other 17 homes tested were okay. We are certain the elevated levels of lead are associated with the service lines and home plumbing. We are working with the Utah Division of Drinking Water and the home owners to minimize the exposure.

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 (800-426-4791).

We at MHID 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.

If you have any questions concerning this report, or any aspect of the quality of your water, please contact one of the following Board of Trustees members or Officers:

Justin Logan	Chairman	801-444-1965
David Johnson	Trustee	801-455-2853
Cliff Hokinson	Trustee	801-546-9343
Frank Ferrante	Financial and Administrative Officer	801-589-3292
Linda Heusser	Clerk	801-544-9463
Mark Pinnau	Operator	385-424-7646

Mutton Hollow Improvement District
PO Box 577
Kaysville, Utah 84037

March 12, 2021

Colt Smith
CCR Compliance
Division of Drinking Water
P.O. Box 144830
Salt Lake City, Utah 84114-4830

Dear Mr. Smith:

Subject: Water Quality Report for *Mutton Hollow Improvement District UTAH06007*

Enclosed is a copy of *Mutton Hollow Improvement District Water Quality Report (Revised)*. It contains the water quality information for our water system for the calendar year 2020..

We have posted this report and Weber Basin Water Conservancy Consumer Confidence report for 2020 on our web site, www.muttonhollowwater.com.

If you have any questions, please contact Frank Ferrante at 801-589-3292

Sincerely,

Frank Ferrante
Financial and Administrative Officer
Mutton Hollow Improvement District