



The Grand Water & Sewer Service Agency
Annual Drinking Water Quality Report
2023

WELCOME

We are pleased to present to you the 2023 Annual Drinking Water Quality Report. This report is designed to inform you about the quality of the water and the services we deliver to you every day. We are committed to ensuring the quality of your water. The Drinking Water Source Protection Plan for the Grand Water & Sewer Service Agency (GWSSA) is available for your review. It contains information about source protection zones, potential contamination sources, and management strategies to protect our drinking water.

Our water source comes from the Glen Canyon Aquifer, which is pumped into three strategically placed storage tanks via four well sites. These wells are called the George White Well #4, George White Well #5, Chapman Well, and the Spanish Valley Well. It has been determined that our water source has a low level of susceptibility to potential contamination from sources such as septic tanks, roads, and residential or industrial development. Even so, we have developed management strategies to further protect our groundwater from contamination. Please contact us if you have questions or concerns about our Source Protection Plan.

CROSS CONNECTION PROGRAM

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 would like to learn more about helping to protect the quality of our water, call us for further information about ways you can help.

WATER

The sources of drinking water for our system include underground 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.

Contaminants that may be present in source water include:

1. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
2. Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

3. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
4. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
5. Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

LEAD LEVELS

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. GWSSA 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> .

MONITORING

GWSSA routinely monitors constituents in our drinking water in accordance with Federal and Utah State laws. The following table shows the results of our monitoring for the period of January 1st to December 31st, 2023.

If you have any questions about this report, please contact the Agency Manager Ben Musselman by calling (435) 259-8121, or you can email him: ben@grandwater.org

CONSTITUENT 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.

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 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.

Source Water Information

Source Water Name	Type Of Water	Source ID
GEORGE WHITE WELL #4	GW	WS002
GEORGE WHITE WELL #5	GW	WS005
CHAPMAN WELL	GW	WS006
SPANISH VALLEY WELL	GW	WS007

TCR Tables

Coliform Bacteria	Year Sampled	+ Sample Count	MCLG	MCL	Violation	Likely Source of Contamination
Coliform Bacteria	2023	0	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	2023	1.3	1.3	0.071	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2023	0	15	0.6	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants

Inorganic Contaminants	Year Sampled	Lowest Level	Highest Level	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2021, 2022	0	0.7	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2021, 2022	0.03	0.047	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	2021, 2022	0.114	0.224	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.

Nitrate	2023	0.162	0.35	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2021, 2022	0.8	1.5	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sodium	2021, 2022	6.484	14.885	500	None	ppm	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
Sulfate	2021, 2022	0.012	0.094	1.3	1.3	ppm	N	Erosion of natural deposits; discharge refineries and factories; runoff from landfills, runoff from cropland
Total Dissolved Solids (TDS)	2021, 2022	0	0.7	0	15	ppb	N	Erosion of natural deposits

Radioactive Contaminants	Year Sampled	Lowest Level	Highest Level	MCLG	MCL	Units	Violation	Likely Source of Contamination
Alpha emitters	2019	0.66	1.3	0	15	pCi/L	N	Erosion of natural deposits.
Radium 228	2019	0	0.24	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	2021, 2022	0.15	0.48	0	0.3	NTU	N	Soil runoff.

MORE INFORMATION

You are welcome to attend any of our regularly scheduled board meetings. They are held on the third Thursday of every month at 7 pm in the Agency Board Room. Notices and agendas can be viewed by going to www.utah.gov/pmnn/index.html and searching for upcoming meetings. Copies of this report are available at the GWSSA office or at www.grandwater.org. Copies will be mailed to customers upon request.

The Grand Water & Sewer Service Agency has no deficiencies with the Division of Drinking Water.