Magna Water District CONSUMER CONFIDENCE REPORT 2020



Spanish (Espanol)

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo entienda bien.

Is my water safe?

YES! Your drinking water meets or exceeds the standards set by the Environmental Protection Agency (EPA), the Utah Department of Environmental

Quality, and the Division of Drinking Water.

We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions?

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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

HOW DO I GET INVOLVED?

Regularly scheduled water district board meetings are posted at the Magna Water District Administration Building at 8885 West 3500 South a week prior to the meeting. The meeting schedule and other public notices are also posted at magnawater.com.

Water Conservation Tips

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily, there are many low-cost and no-cost ways to conserve water. Small changes can make a big difference - try one today and soon it will become second nature.

- Take short showers a 5-minute shower uses 4 to 5 gallons of water compared to up to 50 gallons for a bath.
- Shut off water while brushing your teeth, washing your hair, and shaving and save up to 500 gallons a month.
- Use a water-efficient showerhead. They are inexpensive, easy to install, and can save you up to 750 gallons a month.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Water plants only when necessary.
- Fix leaky toilets and faucets. Faucet washers are inexpensive and take only a few minutes to replace. To check your toilet for a leak, place a few drops of food coloring in the tank and wait. If it seeps into the toilet bowl without flushing, you have a leak. Fixing it or replacing it with a new, more efficient model can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.

Teach your kids about water conservation to ensure a future generation that uses water wisely. Make it a family effort to reduce next month's water bill!

Visit www.epa.gov/watersense for more information.

WHERE DOES MY WATER COME FROM?

Your water comes from 10 wells located in two well fields. Magna Water District owns the land around these wells and restricts any activity that could contaminate them. Additional water is purchased through a perpetual yearly contract with Jordan Valley Water Conservancy District, provides a redundant supply source in case of emergencies.

Why are there contaminants in my drinking water?

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 Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and 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:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;
- Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming;
- 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 stormwater runoff, and septic systems;
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the concentration of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

PROTECTING OUR WATER SOURCES

Surface water (lakes and reservoirs) or ground water (aquifers) serve as sources of drinking water, known as "source water". Magna's Drinking Water Source Protection Plan was updated in 2020. A copy is available upon request by inquiring at the Magna Water District Administration Building at 8885 West 3500 South, or by calling (801) 250-2118.

Source Water Protection Tips

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water source in several ways:

- O Eliminate excess use of lawn and garden fertilizers and pesticides they contain hazardous chemicals that can reach your drinking water source.
- O Pick up after your pets.
- If you have your own septic system, properly **maintain your septic system** to reduce leaching to water sources or consider connecting to a public water system.
- **Oispose of chemicals properly**; take used motor oil to a recycling center.
- **Volunteer in your community**. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use EPA's Adopt Your Watershed to locate groups in your community or visit the Watershed Information Network's How to Start a Watershed Team.
- Organize a storm drain stenciling project with your local government or water supplier. Stencil a message next to the street drain reminding people "Dump No Waste Drains to River" or "Protect Your Water." Produce and distribute a flyer for households to remind residents that storm drains dump directly into your local water body.

Emergency Contact Information

Magna Water District is always exploring effective ways to notify customers in case of a boil order or other water-related emergency. Please sign up on our website for email or text alerts: https://www.magnawater.com/

Note: A precautionary boil order was issued in April 2020 due to issues with Magna's main potable water storage tank. Subsequent testing determined that the water continued to meet all regulatory requirements and at no time was unsafe to drink.

PROTECTING OUR WATER SOURCES (continued)

Public drinking water in your area comes from water wells that tap underground aquifers underlying the town of Magna. You live, work, and play in your drinking recharge area!

Cross Connection Control Survey

The purpose of this survey is to determine whether a cross-connection may exist at your home or business. A cross connection is an unprotected or improper connection to a public water distribution system that may cause contamination or pollution to enter the system. We are responsible for enforcing cross-connection control regulations and ensuring that no contaminants can, under any flow conditions, enter the distribution system. If you have any of the devices listed below, please contact us so that we can discuss the issue, and if needed, survey your connection and assist you in isolating it if that is necessary.

- Boiler/ Radiant heater (water heaters not included)
- Underground lawn sprinkler system
- O Pool or hot tub (whirlpool tubs not included)
- Additional source(s) of water on the property
- Decorative pond
- Watering trough

Household Hazardous Waste is a Threat

Many hazardous products and chemicals such as cleaners, oils and pesticides are used in the home every day. When discarded, these products are called household hazardous waste. Because chemicals found in household hazardous wastes can contaminate soil and groundwater, generate hazardous emissions at landfills and disrupt water treatment plants, it is important to properly dispose of them. Please use, store, and dispose of household hazardous waste in an environmentally responsible manner. Do not dump wastes down a drain or onto the ground.

Pesticides and fertilizers applied to plants during crop, lawn, and garden maintenance may leach into the groundwater and cause contamination. Proper storage, mixing, application, spill cleanup, watering, and disposal procedures should be a part of your best management practices.

HOW DO I MEASURE HOW SAFE THE WATER IS?

The maximum contaminant level or MCL's for drinking water are set at very stringent levels to protect public health. To understand the possible health effects described for EPA regulated constituents, a person would have to drink a half-gallon 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.

Additional Information for 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.

Magna Water 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 http://www.epa.gov/safewater/lead.

Additional Information for Arsenic

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's water quality standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water.

Magna Water District can remove more arsenic from the water, beyond what the EPA requires, but the cost for additional treatment would be overly burdensome to Magna residents. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

DESCRIPTION OF WATER TREATMENT PROCESS

Your water is treated by disinfection. Disinfection involves the addition of chlorine or other disinfectant to kill dangerous bacteria and microorganisms that may be in the water. Disinfection is considered to be one of the major public health advances of the 20th century.

Drinking Water Quality Data Tables

To ensure that tap water is safe to drink, EPA prescribes regulations which limit the number of contaminants in water provided by public water systems. The tables below list all the drinking water contaminants that we detected. Although many more contaminants were tested, only those substances listed below were found in your water.

All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health.

A few naturally occurring minerals may improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report.

The EPA and the State of Utah requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the table.

Wholesale Drinking Water Sources

Jordan Valley Water Conservancy District provides a portion of the water distributed by Magna Water District. Water quality reports for Jordan Valley Water can be found at: https://jvwcd.org/water/wqrpage

DRINKING WATER QUALITY TABLES

Data collected from water delivered in 2020 and earlier.

NA - not applicable, NE - not established, ND - not detected,

MCL = maximum contaminant level, MCLG = maximum contaminant level goal

	Detect Range Sample							
Parameter	MCLG	MCL	Average	Low	High	Date	Violation	Notes / Typical Source
Disinfectants & Disinfection By-Products								
(There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Haloacetic Acids (HAA5) (μg/L)	NA	60	8.9	1.1	8.9	2019	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (µg/L)	NA	80	10.8	5.2	21.8	2020	No	By-product of drinking water disinfection
Inorganic Contaminants								
Arsenic (μg/L)	0	10	7.1	6.6	7.9	2020	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
Nitrate [measured as Nitrogen] (mg/L)	10	10	1.1	NA	NA	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Microbiological Conta	minants							
E. coli (RTCR) - in the distribution system	0	0	0	NA	NA	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliform (RTCR)	0	All repeat samples are negative	0%	0%	0%	2020	No	MCL is for monthly compliance. All repeat samples were negative. No violations were issued. Human and animal fecal waste; naturally occurring in the environment.
Other Organic Contam	ninants							
No additional regulate	d organic	cs were detecte	d					

DRINKING WATER QUALITY TABLES (continued)

Data collected from water delivered in 2020 and earlier.

			Detect	Range		Sample			
Parameter	MCLG	MCL	Average	Low	High		Violation	Notes / Typical Source	
Lead and Copper									
Lead (ppb)	4	90% of homes <15 ppb	All samples <15 ppb	NA	NA	2019	No	Corrosion of household plumbing systems, erosion of naturally occurring deposits.	
Copper (ppm)	1.3	90% of homes <1.3 ppm	1 sample >1.3 ppm	NA	NA	2019	No	Corrosion of household plumbing systems, erosion of naturally occurring deposits.	
Radiologics									
Gross Alpha (pCi/L)	NE	15	<2.1	NA	NA	2017	No	Erosion of natural deposits;	
Gross Beta (pCi/L)	0	50	8.6	NA	NA	2017	No	Erosion of natural deposits;	
Radium 228 (pCi/L)	NE	NE	<0.29	NA	NA	2017	No	Erosion of natural deposits;	
Secondary Contaminants (NSDWRs)									
EPA recommends seco	ndary sta	ındards to wateı	r systems but	does r	ot rec	quire syst	ems to cor	mply with the standard.	
Odor (0-5 Scale)	3	NE	2	NA	NA	2018	No	Corrosion of household plumbing systems, erosion of naturally occurring deposits.	
Color (Color Units)	15	NE	5	NA	NA	2018	No	Corrosion of household plumbing systems, erosion of naturally occurring deposits.	
pH (pH Units)	6.5-8.5	NE	7.7	NA	NA	2018	No	Naturally present in the environment	

ADDITIONAL MONITORING

As part of an on-going evaluation program the EPA has required us to monitor some additional contaminants/chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.

Unregulated Contaminant Monitoring – Round 4

Parameter	Units	Average	Low	High
Germanium	ug/L	0.14	ND	0.24
Manganese	ug/L	0.42	ND	0.93
alpha-BHC	ug/L	ND	ND	ND
Chlorpyrifos	ug/L	ND	ND	ND
Dimethipin	ug/L	ND	ND	ND
Ethoprop	ug/L	ND	ND	ND
Merphos-Oxone	ug/L	ND	ND	ND
Oxyfluorfen	ug/L	ND	ND	ND
Permethrin	ug/L	ND	ND	ND
Profenofos	ug/L	ND	ND	ND
Tebuconazole	ug/L	ND	ND	ND
Butylated Hydroxyanisole	ug/L	ND	ND	ND
O-Toluidine	ug/L	ND	ND	ND
Quinoline	ug/L	ND	ND	ND
2-Methoxyethanol	ug/L	ND	ND	ND
2-Propen-1-ol (Allyl alcohol)	ug/L	ND	ND	ND
n-Butanol	ug/L	ND	ND	ND

ADDITIONAL MONITORING (continued)

Unregulated Contaminant Monitoring – Round 4 (continued)

Parameter	Units	Average	Low	High	
Bromochloroacetic Acid	ug/L	3.55	2.6	4.5	
Bromodichloroacetic Acid	ug/L	2.05	1.3	2.8	
Chlorodibromoacetic Acid	ug/L	1.3	1.3	1.3	
Dibromoacetic Acid	ug/L	3.05	2.7	3.4	
Dichloroacetic Acid	ug/L	6.5	3.2	9.8	
HAA9 Group	ug/L	22.6	15.5	29.7	
Haloacetic Acids (Total)	ug/L	15.65	10.3	21	
Monobromoacetic Acid	ug/L	0.335	ND	0.57	
Monochloroacetic Acid	ug/L	0.67	ND	ND	
Total Brominated HAAs	ug/L	10.25	9.1	11.4	
Tribromoacetic Acid	ug/L	0.67	ND	ND	
Trichloroacetic Acid	ug/L	3.2	3.2	3.2	
Anatoxin	ug/L	<0.01	<0.01	0.023(J)*	
Cylindrospermopsin	ug/L	<0.03	<0.03	<0.03	
Total Microcystins	ug/L	<0.10	<0.10	<0.10	

^{*}Note: This parameter was detected in one out of eight samples, but that detection was below the practical quantitation limit (PQL).