



Annual Water Quality Report 2019

Message from Wendy Barnett, President

Dear Great Basin Water Company (GBWC) Customers,

I am pleased to share your Annual Water Report for 2019. As your community water utility, this direct communication is part of our continuing effort to emphasize to our customers that we understand “water is local.”

Our team is committed to providing safe, reliable and cost effective service to our customers. All of our employees share in our commitment to act with integrity, protect the environment, and enhance the local community.

We are proud to share this report which is based on water quality testing through December 2019. **You will find that we supply water that meets or exceeds all federal and state water quality regulations at your tap.**

These results don't happen by chance. A dedicated local team of water quality experts is working in the community everyday ensuring that our customers are our top priority and providing the highest quality drinking water and service - now and in the years to come.

Best regards,

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Su agua potable cumple o supera todos los estándares federales y estatales de agua potable.

COVID-19 Response

According to the Centers for Disease Control and Prevention (CDC) and the US Environmental Protection Agency (EPA), the virus that causes COVID-19 has not been detected in drinking water. Conventional water treatment methods that use disinfection, such as those provided by Great Basin Water Company, should remove or inactivate the virus that causes COVID-19 as they do for other pathogens. Based on current evidence, the risk to water supplies is low. **You can continue to use and drink water from your tap as usual.** EPA also encourages the public to help keep household plumbing and our nation's water infrastructure operating properly by only flushing toilet paper. **Disinfecting wipes and other items should be disposed of in the trash, not the toilet.** For more information, visit the CDC at <https://www.cdc.gov/coronavirus/2019-ncov/php/water.html> and EPA at <https://www.epa.gov/coronavirus/coronavirus-and-drinking-water-and-wastewater>.

Source of Drinking Water

Our water sources comes from 2 Wells. We treat your water to remove several contaminants and we add disinfectant to protect you against microbial contaminants.

Source Name	Source Water Type
Well Ss6	Ground Water
Well Ss1a	Ground Water

Source Water Assessment

The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. Results of the source water assessment can be obtained at the NDEP's Bureau of Safe Drinking Water 901 South Stewart Street, Suite 3001, Carson City, NV 89701 (775-687-9520).

*Your drinking water **meets or exceeds** all federal and state drinking water standards.*

Simple Water-saving Tips

- Did you know that adding as little as 2% organic material to garden soils can save up to 75% on water use? Desert soils have less than 1% organic material.
- With lack of rainfall and plant material in the natural landscape, there's little to break down to add nutrients to the soil. Desert soils can benefit from extra organic material. This can be accomplished either by adding compost to vegetable gardens before planting each year, or by using organic mulch rather than rock around trees and shrubs. (Do not use organic mulch around cacti and succulents). Recycled yard waste such as chipped branches, leaves and other garden waste or commercial organic material purchased from local nurseries can be used to improve the soil.
- If using a drip irrigation system that is under mulch, wet the surface periodically to help it decompose. Organic mulch is not just a pretty top dressing. It is something that should decompose and add organic material to help feed earthworms, microorganisms and plant roots.
- Up to 60% of organic matter will disappear, so it needs to be replenished once or twice each year. The recommended amount of organic mulch for garden beds is 3 to 4 inches. This will ensure that decomposition continues. The mulch will always look new and fresh, plants and earthworms will be happy and you will be saving water.

For more information check with your local University of Nevada Cooperative Extension office or visit online at: <https://www.unce.unr.edu/>



EPA Wants You To Know

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.

Contaminants that may be present in source water include:

- A. **Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. **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.
- C. **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. **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.
- E. **Radioactive contaminants**, which can be naturally occurring or be the result of oil and gas production and mining activities.

What measures are in place to ensure water is safe to drink?

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

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.

Special notice from EPA for the elderly, infants, cancer patients and people with HIV/AIDS or other immune system problems

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 (1-800-426-4791).

Information Concerning Lead in Water

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. Great Basin Water Company 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>.

Water that remains stationary within your home plumbing for extended periods of time can leach lead out of pipes joined with lead-containing solder as well as brass fixtures or galvanized pipes. Flushing fixtures has been found to be an effective means of reducing lead levels. The flushing process could take from 30 seconds to 2 minutes or longer until it becomes cold or reaches a steady temperature. Faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Consumers should be aware of this when choosing fixtures and take appropriate precautions. Visit the NSF Web site at www.nsf.org to learn more about lead-containing plumbing fixtures.

Drain Disposal Information

Sewer overflows and backups can cause health hazards, damage home interiors, and threaten the environment. A common cause is sewer pipes blocked by grease, which gets into the sewer from household drains. Grease sticks to the insides of pipes. Over time, the grease can build up and block the entire pipe. Help solve the grease problem by keeping this material out of the sewer system in the first place:

- Never pour grease down sink drains or into toilets. Scrape grease into a can or trash.
- Put strainers in sink drains to catch food scraps / solids for disposal.

Prescription Medication and Hazardous Waste

Household products such as paints, cleaners, oils, and pesticides, are considered to be household hazardous waste. Prescription and over-the-counter drugs poured down the sink or flushed down the toilet can pass through the wastewater treatment system and enter rivers and lakes (or leach into the ground and seep into groundwater in a septic system). Follow the directions for proper disposal procedures. **Do not flush hazardous waste or prescription and over-the-counter drugs down the toilet or drain.** They may flow downstream to serve as sources for community drinking water supplies. Many communities offer a variety of options for conveniently and safely managing these items. For more information, visit the EPA website at: www.epa.gov/hw/household-hazardous-waste-hhw.

FREE

Water Conservation Kit to all of our single and multi-family residential customers featuring water-saving plumbing retrofit fixtures. These one kit per household are available at no charge to help make conserving water that much easier

Water Conservation Rebates

Apply within 60 days of purchasing

For more information and eligibility call 844-694-4404 Or Email: BeWaterSmart@greatbasinwaterco.com

Download forms at: www.GreatBasinWaterCo.com

The Safe Drinking Water Act was passed in 1974 due to congressional concerns about organic chemical contaminants in drinking water and the inefficient manner by which states supervised and monitored drinking water supplies. Congress' aim was to assure that all citizens served by public water systems would be provided high quality water. As a result, the EPA set enforceable standards for health-related drinking water contaminants. The Act also established programs to protect underground sources of drinking water from contamination.

Understanding This Report In order to help you understand this report, we want you to understand a few terms and abbreviations that are contained in it.

Action level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Average (Avg)	Regulatory compliance with some MCLs is based on running annual average of monthly samples .
EPA	Environmental Protection Agency.
Maximum contaminant level (MCL)	The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
Maximum contaminant level goal (MCLG)	The "goal" is the level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's 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.
Not Applicable (N/A)	Information not applicable/ not required for that particular water system or for that particular Rule.
Not Detected (ND)	Laboratory analysis indicates that the constituent is not present.
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.
Picocuries per liter (pCi/L)	A measure of radioactivity in the water.
Running Annual Average (RAA)	Calculated running annual average of all contaminant levels detected.

SMART WATERING

WaterSense labeled irrigation controllers, which act like a thermostat for your sprinkler system by telling it when to turn on and off, use local weather and landscape conditions to tailor watering schedules to actual conditions on the site. Instead of irrigating using a controller with a clock and a preset schedule, WaterSense labeled controllers allow watering schedules to better match plants' water needs. With proper installation, programming, and maintenance, homeowners and businesses can use WaterSense labeled controllers instead of standard clock-timer controllers on their existing systems, and no longer worry about wasted water.

WATERSENSE SAVINGS

Replacing a standard clock timer with a WaterSense labeled irrigation controller can save an average home nearly 7,600 gallons of water annually. If every home in the United States with an automatic irrigation system installed and properly operated a WaterSense labeled irrigation controller, we could save \$1 billion in water costs and 100 billion gallons of water across the country annually from not overwatering lawns and landscapes. That's equal to the annual household water needs of nearly 1.2 million average American homes.



[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.](#)

Monitoring Your Water

We routinely monitor for contaminants in your drinking water according to Federal and State laws. The following table(s) lists all the drinking water contaminants that were detected in the last round of sampling for the particular contaminant

group. The presence of contaminants does not necessarily indicate that water poses a health risk. **Unless otherwise noted, the data presented in the table is from testing done January 1 through December 31, 2019.** The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, maybe more than one year old. *MCLs 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.*

If You Have Questions Or Want To Get Involved

GBWC– Spanish Springs Division does not currently hold regular public meetings. Should the Utility hold a public meeting, you will be notified through the mail or public notice. If you have any questions about this report or your water utility, please call GBWC at 844.694.4404. We want our customers to be informed about their water utility.

Visit us online at www.GreatBasinWaterCo.com to view the Water Quality Reports. Also visit our website for water conservation tips and other educational material.

Violations

In 2019, GBWC performed all required monitoring for contaminants. One **Nitrate Exceedance Violation** was issued from the Nevada Division of Environmental Protection and a public notice was issued until repeat water sampling was completed and all sample results returned under the MCL. **Uno violación de agua potable fue reportada en el año 2019.**

Microbiological	Violation	Result	MCL	MCLG	Typical Source
No Detected Microbiological Contaminants Were Found In the Calendar Year of 2019.					
NITRATE SINGLE SAMPLE MCL VIOLATION DURING MONITORING PERIOD 10/1/2019-12/31/2019 (PUBLIC NOTICE ISSUED)					

Water Quality Test Results

Detected Substance (units)	Sample Date	Highest Lever	Range	MCL	MCLG	Violation	Sources of Contaminants
Inorganic Contaminants							
ARSENIC (ppb)	5/3/2019	12**	4 – 12	10	0	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
FLUORIDE (ppm)	8/21/2019	<0.1	<0.1 – <0.1	2	4	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NITRATE (ppm)	8/21/2019	3.6	3.6 - 12.0	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
NITRATE-NITRITE (ppm)	8/21/2019	7.2	6.8 – 7.2	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
BARIUM (mg/l)	8/22/2012	0.17	0.048 – 0.17	2.0	2.0	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CHROMIUM (mg/l)	8/22/2012	0.003	0.002 – 0.003	0.10	0.10	No	Discharge from steel and pulp mills; Erosion of natural deposits
SELENIUM (mg/l)	8/22/2012	0.005	<0.005 – 0.005	0.05	0.05	No	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines

****Compliance is based on a Running Annual Average of samples taken. The Running Annual Average for Arsenic was below the MCL of 10 ug/L, therefore there was not a violation.** While your drinking water meets EPA's standard for Arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. 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. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

- The State of Nevada has set forth a more stringent MCL of 2.0 mg/L for **Fluoride** than the federal limit of 4.0 mg/L assigned nationally. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of the teeth of children, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.

- Nitrate** in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

- Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

Radionuclides

COMBINED RADIUM (-226 & -228) (pCi/l)	5/28/2015	0.248	0.214 - 0.248	5	0	No	Erosion of natural deposits
URANIUM (ug/l)	8/14/17	10	3 - 10	30	0	No	Erosion of natural deposits
GROSS ALPHA, INCL. RADON & U (pCi/l)	8/14/2017	11.0	3.38 – 11.00	15	0	No	Decay of natural and man-made deposits
GROSS BETA PARTICLE ACTIVITY (pCi/l)	8/14/2017	4.74	4.39 – 4.74	50	0	No	Decay of natural and man-made deposits
RADIUM-226 (pCi/l)	5/28/2015	0.172	0.0565 – 0.172	5	0	No	Erosion of natural deposits
RADIUM 228 (pCi/l)	5/28/2015	0.157	0.0762 – 0.157	5	0	No	Erosion of natural deposits
RADON (pCi/l)	8/14/2017	756	640 - 756	(pCi/l)			

Note: EPA considers 50 pCi/L to be the level of concern for beta particles.

<u>Disinfection By-Products</u> (units)	Sample Date	RAA	Range	MCL	MCLG	Violation	Sources of Contaminants
HAA5 (ppb)	2019	8.8	8.8	60	N/A	No	By-product of disinfection
TTHM (ppb)	2019	23	23	80	N/A	No	By-product of disinfection
CHLORINE (ppm)	2019	0.50	0.21 – 0.99	MRDL= 4.0	MRDLG =4.	No	Water additive to control microbes

<u>Lead and Copper</u> (Units)	Sample Date	Report Level 90 th percentile	Range of Detects	# of sites found above AL	ALG	AL	Sources of Contaminants
Copper (ppm)	2017	0.22	0.002 – 0.170	0	1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2017	9	<1.0 – 12	0	0	15	Corrosion of household plumbing systems; Erosion of natural deposits

Your water meets EPA's standard for Lead, but if at elevated levels, this contaminant can cause serious health problems, especially for pregnant woman and young children.

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	Secondary Standard
CHLORIDE	8/21/2019	81	48 – 81	mg/L	400
MAGNESIUM	8/21/2019	32	15 – 32	mg/L	150
MANGANESE	8/21/2019	<0.001	<0.001 - <0.001	mg/L	0.1
NICKEL	8/21/2019	0.005	0.003 - 0.005	mg/L	0.1
pH	8/21/2019	8.08	8.07 – 8.08	pH	8.5
SODIUM	9/13/2018	47	26 - 47	mg/L	200
SULFATE	8/21/2019	84	50 - 84	mg/L	500
TDS	8/21/2019	610	360 – 610	mg/L	1000
ZINC	8/21/2019	<0.01	<0.01 - <0.01	mg/L	5

PFAS Testing

Great Basin Water Company is currently conducting statewide drinking water testing for Per- and Polyfluoroalkyl Substances (PFAS). These man-made compounds are used in the manufacturing of products resistant to water, grease or stains including firefighting foams, cleaners, cosmetics, paints, adhesives and insecticides. PFAS can migrate into the soil, water, and air and is likely present in the blood of humans and animals all over the world. The Environmental Protection Agency (EPA) has established a health advisory level at 70 parts per trillion. For more information visit <https://www.epa.gov/ground-water-and-drinking-water/drinking-water-health-advisories-pfoa-and-pfos>. Notification has or will be sent to all registered customers of the testing results once completed.

Great Basin Water Company is committed to providing safe, reliable, and cost-effective drinking water services to all of our customers.

To access your utility account anytime, anywhere, please register for our customer portal & download MyUtilityConnect at <https://connect.myutility.us/connect/>

