

GARDNERVILLE RANCHOS GID

Water Quality Report - 2021

Covering Calendar Year – 2020

GRGRID water met all Federal and State regulations for 2020.

The bottom line is that the water that is provided to you is safe.

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are continually being made to improve their water systems. To learn more, please attend any of the regularly scheduled meetings.

For more information, please contact GREG REED at:

775-265-2048.

Your water comes from:

Source Name	Source Water Type
WELL 5	Ground Water
WELL 8	Ground Water
WELL 1	Ground Water
WELL 4A	Ground Water
WELL 6	Ground Water
WELL 9 ROCKY TERRACES ESTATES	Ground Water
WELL 2A	Ground Water

We treat your water to remove several contaminants and we add disinfectant to protect you against microbial contaminants. 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. The state has completed an assessment of our source water. For results of the source water assessment, please contact GRGRID or NDEP.

Message from EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those 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).

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 (800-426-4791).

The sources of drinking water (both tap water and bottled water) included 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 before we treat it include:

Microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, can be naturally occurring or the result of mining activity

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, may also come from gas stations, urban storm water run-off, and septic systems.

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. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system tested a minimum of 10 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presences in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television, or radio.

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the “Goal” is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG’s allow for a margin of safety.

Maximum Contaminant Level (MCL): the “Maximum Allowed” MCL is 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.

Secondary Maximum Contaminant Level (SMCL): set non-mandatory water quality standards for 15 contaminants. EPA does not enforce these "secondary maximum contaminant levels" (SMCLs). They are established as guidelines to assist public water systems in managing their drinking water for aesthetic considerations, such as taste, color, and odor.

Action Level (AL): the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that 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 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. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Non-Detects (ND): laboratory analysis indicates that the constituent is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter ($\mu\text{g}/\text{l}$)

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.

Running Annual Average (RAA): a calculation of the Running Annual Average concentration of a contaminant rather than a one-time result.

Water Quality Data

The following tables list all of the drinking water contaminants which were detected during the 2020 calendar year. The presence of these contaminants does not necessarily indicate the water poses a health risk. Unless noted, the data presented in this table is from testing conducted January 1 - December 31, 2020. 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, is more than one year old. **The bottom line is that the water that is provided to you is safe.**

Testing Results for GARDNERVILLE RANCHOS GID

Microbiological	Result	MCL			MCLG	Typical Source
No Detected Results were Found in the Calendar Year of 2020						

Disinfection By-Products		Monitoring Period	RAA	Range	Unit	MCL	MCLG	Typical Source
TTHM								
2020		2	0 - 1.5		ppb	80	0	By-product of drinking water chlorination
Lead and Copper	Date	90 TH Percentile		Unit	AL	Sites Over AL	Typical Source	
COPPER	2017 - 2019	0.09		ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural	

							deposits; Leaching from wood preservatives.
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Regulated Contaminants	Collection Date	Highest Value		Range	Unit	MCL	MCLG	Typical Source
ARSENIC*	10/7/2020	6.5		5 - 6.5	ppb	10	0	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
BARIUM	10/10/2018	0.079		0.052 - 0.079	ppm	2	2	Discharge of drilling wastes; Discharge from metal refineries Erosion of natural deposits.
FLUORIDE	1/28/2020	1.6		0 - 1.6	ppm	2	4	Natural deposits; Water additive which promotes strong teeth.
NITRATE	1/28/2020	2.7		0 - 2.7	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
COMBINED URANIUM	1/28/2020	2.4	2.4	µg/L	30	0	Erosion of natural deposits
GROSS BETA PARTICLE ACTIVITY	2/12/2020	4.6	0 - 4.6	pCi/L	50	0	Decay of natural and man-made deposits

Health Information About Water Quality

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.

* Arsenic compliance is evaluated with a running annual average, not the highest value.

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.

GRGRID routinely monitors for LEAD in our water. Because **lead is not detected in our water**, we are not required to report it in our Annual Water Quality Report and is not located in the tables above. Your water meets the EPA's standard for Lead. If present at elevated levels, this contaminant 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. Your Water System 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 drinking 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>.

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
ALKALINITY, BICARBONATE	10/10/2018	130	77 - 130	mg/L		
ALKALINITY, TOTAL	10/10/2018	130	77 - 130	mg/L		

ARSENATE (AS(V))	8/13/2019	6.22	6.22	ug/L	
ARSENITE (AS(III))	8/13/2019	0.03	0.03	ug/L	
BORON, TOTAL	10/10/2018	0.18	0.13 - 0.18	mg/L	
CALCIUM	10/10/2018	36	21 - 36	mg/L	
CHLORIDE	1/28/2020	11	4.9 - 11	mg/L	400
COLOR	1/28/2020	2.5	0 - 2.5	CU	15
CONDUCTIVITY @ 25 C UMHOS/CM	10/10/2018	320	200 - 320	UMHO/CM	
HARDNESS, TOTAL (AS CACO3)	10/10/2018	130	64 - 130	mg/L	
IRON	1/28/2020	0.65	0 - 0.65	mg/L	0.6
MAGNESIUM	1/28/2020	7	2.5 - 7	mg/L	150
MANGANESE	1/28/2020	0.022	0 - 0.022	mg/L	0.1
PH	1/28/2020	8.38	7.8 - 8.38	PH	8.5
POTASSIUM	10/10/2018	2.5	2.1 - 2.5	mg/L	
SILICA	10/10/2018	32	28 - 32	mg/L	
SODIUM	1/28/2020	52	14 - 52	mg/L	200
SULFATE	1/28/2020	53	17 - 53	mg/L	500
TDS	1/28/2020	230	130 - 230	mg/L	1000
TEMPERATURE (CENTIGRADE)	10/10/2018	24	22 - 24	C	
ZINC	1/28/2020	0.19	0 - 0.19	mg/L	5



Violations

During the 2020 calendar year, GARDNERVILLE RANCHOS GID is required to include an explanation of the violation(s) in the table below and the steps taken to resolve the violation(s) with this report.

Type	Category	Analyte	Compliance Period
REPORT SAMPLE RESULT/FAIL MONITOR RTCR	RPT	REVISED TOTAL COLIFORM RULE (RTCR)	12/1/2020 - 12/31/2020

Health Information About the Above Violation(s)

During 2020, the District implemented a cross training program that would allow all Water Operators to take routine water bacterial samples. Prior to 2020, all samples were taken by a single individual. If that individual was to become incapacitated in any way, they would not be able to conduct sampling. Therefore, the District implemented a cross training program that would allow any on-call operator take the routine samples during the week of the month that they were on call. During this process, the chain of custody form was not properly filled out. The error on the chain of custody form indicated to the lab that the sample was not for compliance and therefore the lab did not report it to the State. The District's process did not allow for the non-reporting to be flagged. Since then, the District has altered its processes to ensure that the chain of custody form is properly filled out and we have modified our process of receiving results from the lab to ensure that we have no further violations. The violation was a reporting violation. There was no threat to the District's water due to the error.



South District Pipeline Replacement Project.

The District is embarking on a multiyear, phased approach to replace the Schedule 40 (Plastic) and Asbestos /

Cement (A/C) pipe within the District boundaries. Phase 1 of the project is slated to begin late in 2021. This phase will replace the majority (approximately 22,000 feet) of the A/C pipe located within the District. The following phases will replace approximately 66,000 feet of Schedule 40 pipe. The entire project is estimated to cost approximately \$14 Million. The District intends to use a combination of reserves, borrowing and potential future rate increases to pay for the project.

Areas impacted by all phases of the construction will include those areas of the District bounded by Long Valley on the East, Mary Jo and Rancho Road on the South and, Tillman on the West and Bluerock and James on the North. Each of the phases will be advertised to notify residents about when the project will impact them. Upon completion of the project, it is expected that the new pipe will serve the District for the next 100 years (expected life of the new pipe) or more. Phase 1 is indicated by the Magenta lines below, except for the lines on Sorenson and the South end of Tillman.

