

SUN VALLEY GENERAL IMPROVEMENT DISTRICT

WATER QUALITY REPORT 2022

Data Collected For 2021 Calendar Year

Sun Valley General Improvement District (District) is proud that our drinking water continues to meet all state and federal drinking water quality standards as it has for more than 50 years. We know the quality of your drinking water is important to you and we take drinking water regulations very seriously.

This annual drinking water quality report for data collected calendar year 2021 is designed to inform you about your drinking water quality. The Safe Drinking Water Act 1996 amendments require that all community water systems make available to customers an annual report on the quality of their drinking water, by July 1st of each year. Your drinking water system is owned by you, the customer, and operated and maintained by the Sun Valley General Improvement District. We hope this report looks familiar to you. Inside the report you'll find accurate information about your drinking water from source to tap. We know the information in this report is complex. The content of the report, the language in it, and the format for reporting compliance monitoring results are required by law. We have attempted to include all the necessary information.

If you have any questions about this report or concerning your water utility, please contact Chris Melton, our General Manager or Brad Baeckel, our Public Works Director at (775) 673-2220. 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 second and fourth Thursdays of every month at 6 PM at the District office located at 5000 Sun Valley Blvd., Sun Valley, NV 89433.

Very truly yours,

Sandra Ainsworth, Chair

ENVIRONMENTAL PROTECTION AGENCY HEALTH INFORMATION

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 persons and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency/Center for Disease Control and Prevention 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.

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly-used filtration methods cannot guarantee 100 percent removal. Truckee Meadows Water Authority monitoring indicates the presence of these organisms in our source water. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of *Cryptosporidium* may cause *Cryptosporidiosis* and abdominal infection. Symptoms of the infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at a greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease and it may be spread through means other than drinking water.

Coliform is a type of bacteria which presence in groups is an indication of possible pathogenic bacterial contamination. The District did not receive any positive coliform samples during the routine sampling in 2021.

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide similar protection for public health. For more information on bottled-water quality, call the International Bottled Water Association at (800) WATER-11.

WHAT THE DISTRICT IS DOING TO KEEP THE TAP WATER SAFE

The District literally monitors your water quality every day. Our professional staff checks all water storage tanks every day, monitors the levels and pumping with our SCADA (Supervisor Control and Data Acquisition) system and has an extensive flushing and maintenance program. In addition, we take 20 water quality samples around the valley every month that are tested by the Nevada State Health Laboratory. We also monitor the chlorine residual and turbidity levels and are well within state and federal standards. Should you ever have concerns about your water, please feel free to call our office and schedule a time for a test, at no cost to you. Please allow 48 hour notice.



REQUIRED CONSUMER CONFIDENCE REPORT (CCR) STATEMENT ADDRESSING LEAD IN DRINKING 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. 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 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 (800) 426-4791 or at <http://www.epa.gov/safewater/lead>.

Important Drinking water definitions

TERM	DEFINITION
MCL	Maximum Contaminant Level – The highest level of 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
MCLG	Maximum Contaminant Level Goal – The level of contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.
TT	Treatment Technique – A process intended to reduce the level of a contaminant in drinking water.
MRDL	Maximum Residual Disinfectant Level – The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the additional of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal – 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.
AL	Action Level – The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variance and Exemptions	State EPA permission not to meet an MCL or treatment technique under certain conditions.
NTU	Nephelometric Turbidity Units – Turbidity is a measure of the cloudiness of the water. The District monitors it because it is a good indicator of the effectiveness of the District's filtration system.
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level

Unit Descriptions

TERM	DEFINITION	TERM	DEFINITION
ug/L	Number of micrograms of substance in one liter of water	% positive samples/month	Percent of samples taken monthly that were positive
ppm	Parts per million, or milligrams per liter (mg/L)	NA	Not applicable
ppb	Parts per billion, or micrograms per liter (ug/L)	ND	Not detected
pCi/L	Picocuries per liter (a measure of radioactivity)	NR	Monitoring not required, but recommended

SOURCE WATER ASSESSMENT PROGRAM SUMMARY

The federal Safe Drinking Water Act was amended in 1996 and requires states to develop and implement source water assessment programs to analyze existing and potential threats to the quality of public drinking water throughout the state. A summary of the Districts' susceptibility to potential sources of contamination was initially provided by the State of Nevada in May of 2006. The summary of this source water assessment (SWA) was first included in the Districts' Water Quality Report and now may be obtained online <http://www.svgid.com> or by contacting us at (775) 673-2220.

Those who wish to view additional information pertaining to the initial findings of the source water assessment may do so in person at the offices of the Bureau of Safe Drinking Water, 901 South Stewart St., Ste. 4001, Carson City, NV 89701. Appointments are suggested; please call (775) 687-9521. Office hours are 8 am to 5 pm, Monday through Friday.

WHERE DOES THE DISTRICT'S WATER COME FROM

All water in Sun Valley is pre-treated and purified by Truckee Meadows Water Authority (TMWA). Our water starts at Lake Tahoe, one of the purest lakes in the world. From there it flows into the Truckee River which is fed not only by Tahoe, but several mountain lakes and streams. In addition to the river, TMWA also has several wells in the Truckee Meadows that supply about 25% of the water supply. The water is screened, filtered, and treated at the two water treatment plants in our area (Glendale and Chalk Bluff). After leaving the treatment plants our water runs through a series of water mains and pump stations and is received at our main booster pump station located at our offices at 5000 Sun Valley Blvd. or from our second wholesale point at the Boundary Tank site at the top of West 7th Ave. From there we boost the water up to our nine water storage tanks located around the valley. These water storage tanks hold a combined 9.4 million gallons of water. The water is then gravity fed into our distribution system and from there into your tap. Because we take such pride in the quality of our water, if at any time you notice a change in the taste, odor, or clarity of your drinking water, please call our offices and we will be happy to test the water. All water quality data is available free of charge upon customer request. If you ever have any questions about our water operations, please call our office at (775) 673-2220 and one of our supportive, friendly staff will be glad to help you.

TMWA'S WATER QUALITY REPORT

TMWA's Water Quality Report is a detailed account of everything in the water. The District works closely with TMWA to safeguard the quality of your water. TMWA's Water Quality Report is available TMWA's website, <http://www.tmwa.com>, under Water Quality. Should you have any questions regarding TMWA's report, please feel free to call (775) 834-8118, or you can call the District and we will be happy to assist you.

TMWA'S 2022 QUALITY DATA TEST RESULTS

The table below lists all of the drinking water contaminants that TMWA detected during the 2021 calendar year of this report. The presence of contaminants in the water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the state requires them to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Contaminants	MCLG or MRDLG	MCL, TT or MRDL	2021 Result	System Weighted Average	Range Low	Range High	Violation	Typical Source	
Disinfectants & Disinfection By-Products (There is convincing evidence of disinfectants is necessary for control of microbial contaminants)									
Chlorine (as CL ₂) (ppm)	4	4	0.98	NA	0.14	1.47	No	Water additive used to control microbes	
Haloacetic Acids (HAA5) (ppb)	NA	60	23	NA	ND	41	No	By-product of drinking water chlorination	
TTHMs (Total Trihalomethanes) (ppb)	NA	80	35	NA	ND	64	No	By-product of drinking water disinfection	
Inorganic Contaminants									
Antimony (ppb)	6	6	2.32	0.0280	ND	5.30	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; test addition	
Arsenic (ppb)	0	10	8.88	0.216	ND	13.9	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	
Barium (ppm)	2	2	0.137	0.0168	0.0137	0.119	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	
Chromium (ppb)	100	100	6.54	0.0150	ND	6.54	No	Discharge from steel and pulp mills; Erosion of natural deposits	
Flouride (ppm)	4	4	0.242	0.00115	ND	0.242	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	
Nitrate (measured as Nitrogen) (ppm)	10	10	7.87	0.149	ND	7.87	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Nitrate-Nitrite (measured as Nitrogen) (ppm)	10	10	3.94	0.0643	ND	3.94	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Selenium (ppb)	50	50	2.66	0.00616	ND	2.66	No	Discharge from petroleum and metal refineries; Erosion on natural deposits; Discharge from mines	
Microbiological Contaminants									
Total Coliform (RTCR)	NA	TT	0	0	0	0	No	Naturally present in the environment	
Turbidity (NTU)	100% of the samples were below the TT value of 0.3. A value less than 95% constitutes as TT violation. The highest single measurement was 0.056 NTU. Any measurement in excess of 1 NTU is a violation unless otherwise approved by the state.							No	Soil runoff
Radioactive Contaminants									
Combined Uranium (ppb)	0	30	12.9	0.0705	ND	12.9	No	Erosion of natural deposits	
Alpha Particles (pCi/L)	0	15	4.6	0	ND	4.6	No	Erosion of natural deposits	
Volatile Organic Contaminants									
Trichloroethylene (ppb)	0	5	1.69	0.00339	ND	1.69	No	Discharge from metal degreasing sites and other factories	
Tetrachloroethylene (ppb)	0	5	3.35	0.0122	ND	3.35	No	Discharge from factories and dry cleaners	
Contaminants	MCLG	Action Level	Your Water	# of Samples Exceeding Action Level	Exceeds Action Level?		Typical Source		
Inorganic Contaminants (2019 Reported Level)									
Copper – action level at consumer taps (ppm)	1.3	1.3	0.106	0	No		Corrosion of household plumbing systems; Erosion of natural deposits		
Lead – action level at consumer taps (ppb)	0	15	ND	0	No		Corrosion of household plumbing systems; Erosion of natural deposits		

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Contaminants	MCLG or MRDLG	MCL, TT or MRDL	2021 Result	System Weighted Average	Range Low	Range High	Violation	Typical Source
Disinfectants & Disinfection By-Products (There is convincing evidence of disinfectants is necessary for control of microbial contaminants)								
Chlorine (as CL2) (ppm)	4	4	0.82	NA	0.14	1.27	No	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	19	NA	10	25	No	By-product of drinking water chlorination
THMs (Total Trihalomethanes) (ppb)	NA	80	35	NA	17	44	No	By-product of drinking water disinfection
Microbiological Contaminants								
Total Coliform (% positive samples/month)	0	0	0	0	0	0	No	Naturally present in the environment

The following are the results of the Sun Valley G.I.D. Lead and Copper tests that were last sampled in August of 2021 (We are required to sample every three years and our next sampling will be in August of 2024). You may find terms or abbreviations you may not be familiar with. To help you better understand these terms we have provided the following definitions:

- ***Action Level** – is the concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- ***ppm – Parts per million** corresponds to one penny in \$10,000.
- ***ppb - Parts per billion** corresponds to one penny in \$1,000,000.
- ***Lead and Copper** – 32 samples were collected, from residential sites, to measure corrosivity.

Name	Date	Action Level*	Above Action Level	90th Percentile Result	Violation	Typical Source
Inorganic Contaminants						
Lead	2021	15 ppb	0%	2 ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	2021	1.3 ppm	0%	0.050 ppm	No	Corrosion of household plumbing systems; Erosion of natural deposits

Your water meets State and federal requirements for Lead, but, 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. Sun Valley General Improvement District 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>.

Notes: SYSTEM WEIGHTED AVERAGE: The 2022 Water Quality Report is mandated by the EPA to give our consumer the HIGHEST recorded value of any constituent detected from all sources in 2021. However, most groundwater wells, in which most of our reported constituents were detected, are only used when system demands are at their peak during the summer months. In 2021, these wells made up less than 15 percent of the water that TMWA and Sun Valley customers consumed. The “system weighted average” value is based on the percentage of total production and highest compliance value recorded for the year. In this way, we not only report the highest value detected in our system for any constituent, but we also give you an idea of how little that groundwater is used when compared with the total water produced from our two surface water plants. This report will also allow us to give you a more meaningful representation of the water you receive, not just a highest detected value for a well that may only operate one day a week.

Contaminants that may be present in source water before it is treated include:

Microbial contaminants, such as viruses and bacteria, which 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 storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture and residential uses.

Radioactive contaminants, which are naturally occurring.

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.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits 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. Further questions can be answered by calling the EPA’s Safe Drinking Water Hotline (800) 426-4791.