



CITY OF
LAS VEGAS
NEW MEXICO

2022

Drinking Water Quality Report

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INTRODUCTION

2022 City of Las Vegas Drinking Water Quality Report

The City of Las Vegas is delighted to present to you this year's Drinking Water Quality Report also known as the Consumer Confidence Report. This report is required to be provided to all consumers annually by the Safe Drinking Water Act and implemented by the Environmental Protection Agency. In this report we will provide details about the source of our water, the treatment process, what our water contains and how it compares to federal standards set by regulatory agencies.



Is my water safe?

City of Las Vegas water meets standards set by the Safe Drinking Water Act. Last year we conducted tests for over 80 contaminants and all contaminants detected were below the Maximum Contaminant Level (MCL).

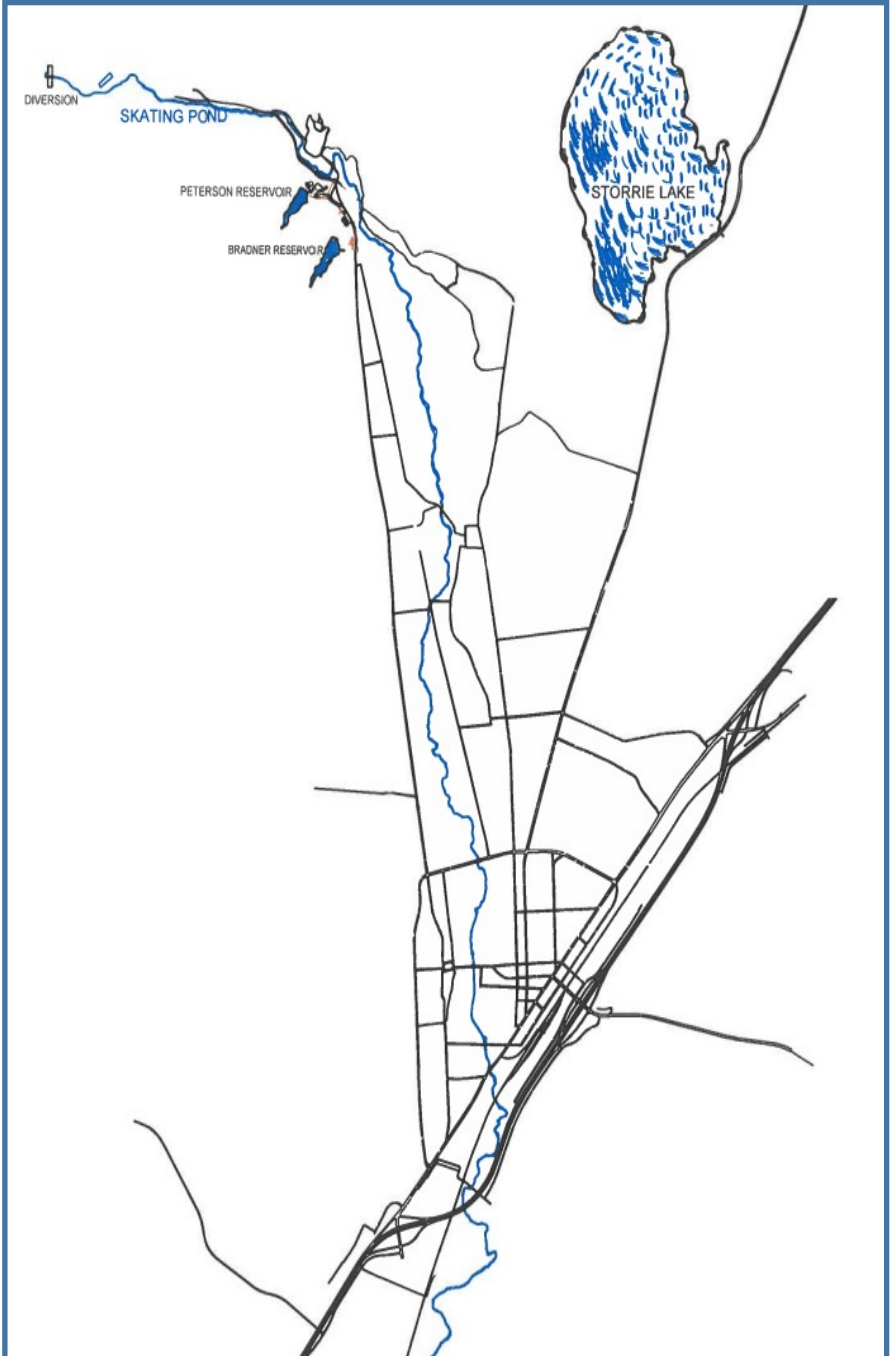
Spanish (Español)

Este informe contiene información muy importante sobre la calidad de su agua potable. Tradúscalo o hable con alguien que lo entienda

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? City of Las Vegas residents are more conservative on their water consumption. Las Vegas households use approximately 150 gallons of water per day and 65 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're 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.



CITY OF LAS VEGAS WATER SYSTEM

CITY OF LAS VEGAS WATER SUPPLY SYSTEM

WHERE DOES OUR WATER COME FROM

The primary water source for the City of Las Vegas drinking water is surface water acquired from the Gallinas River and stored in Storrie Lake, Peterson and Bradner Reservoirs. Bradner Reservoir was offline from 2014 to 2019 for rehabilitation. Rehabilitation of the embankments and spillway is complete and filling began on August 2019. Permit is dependent on maintaining final hold elevation. An alternate source of water, for approximately 10% of the city's needs, is the Taylor Well Field. This water is used sparingly to avoid impacts to the aquifer. Due to maintenance and repairs on well field equipment and minimizing impacts to the aquifer, groundwater was not pumped into the city's distribution system in 2022.



DESCRIPTION OF WATER TREATMENT PROCESS

Your water is treated in a "treatment train" (a series of processes applied in a sequence) that includes coagulation, flocculation, sedimentation, filtration, and disinfection. Coagulation contributes to the removal of dirt and other particles suspended in the source water by adding chemicals (coagulants) to form tiny sticky particles called "floc," which attract the dirt particles. Flocculation (the formation of larger flocs from smaller flocs) is achieved using gentle, constant mixing. The heavy particles settle naturally out of the water in a sedimentation basin. The clear water then moves to the filtration process where the water passes through sand, gravel, charcoal or other filters that remove even smaller particles. A small amount of sodium hypochlorite is the disinfectant used to kill bacteria and other microorganisms (viruses, cysts, etc.) that may be in the water before water is stored and distributed to homes and businesses in the community.



HOW TO GET INVOLVED

The Las Vegas Utility Advisory Committee and City Council meet regularly to discuss topics critical to our water system. Contact the City Clerks Office at (505) 454-1401 for information on dates and times these meetings are held. Information is also available online at www.lasvegasnm.gov. Consider volunteering with local watershed groups, which can be found on EPA's Adopt a Watershed network.



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).

CROSS CONNECTION CONTROL

The purpose of a cross connection 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 insuring 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 dis-



cuss 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
- Pool or hot tub
- Additional source(s) of water on the property
- Decorative pond
- Watering trough
- Wells

SOURCEWATER



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:

- Eliminate excess use of lawn and garden fertilizers and pesticides - they contain hazardous chemicals that can reach your drinking water source.
- Pick up after your pets.
- If you have your own septic system, properly maintain your system to reduce leaching to water sources or consider connecting to a public water system.
- Dispose 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.

SOURCE WATER ASSESSMENT AND ITS AVAILABILITY

For more information about contaminants, testing methods, potential health and steps you can take to minimize exposure contact EPA's Safe Drinking Water Hotline (800) 426-4791 or visit their www.epa.gov/safewater. More information on the City of Las Vegas Public Water Supply can be obtained online at www.dww.water.nm.env.nm.gov or obtaining a copy of the Source Water Assessment conducted by contacting David Torres at (505) 841-5306 or david.torres@env.nm.gov or by calling the Utilities Department at (505) 454-3832.



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

The substances that can be picked up in the flowing water include microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants can also be added to the raw water. Examples are 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; pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

In addition, 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 can also end up in raw water.

Finally, radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities can be picked up in raw source water.

REGULATION OF DRINKING WATER

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount 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.





TESTING FOR WATER QUALITY

IS THERE LEAD IN MY DRINKING WATER?

Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. City of Las Vegas transmission and main water lines are made of steel, cast iron, ductile iron, PVC (C900) or concrete cylinder pipe. City of Las Vegas is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components on the business or homeowners side of the meter.

HEALTH EFFECTS

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. 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>.

METHODS TO LIMIT LEAD EXPOSURE

- Run your tap for 30 seconds to 2 minutes before using water for drinking or cooking
- Use Cold water
- Remove and Clean faucet screen (aerator) monthly
- Hire a licensed plumber to identify and replace lead service lines or plumbing fixtures.

WATER QUALITY DATA TABLE

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The water quality table page lists all of the drinking water contaminants that we detected during the calendar year of this report. 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 actually 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 or the State 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 the water quality 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 following definitions.

Unit Descriptions

TERM	DEFINITION
ug/L	Number of micrograms of substance in one liter of water
ppm	parts per million, or milligrams per liter (mg/L)
ppb	parts per billion, or micrograms per liter (µg/L)
pCi/L	picocuries per liter (a measure of radioactivity)
NTU	Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.
NA	Not applicable
ND	Not detected
NR	Monitoring not required, but recommended.

Drinking Water Definitions

TERM	DEFINITION
MCLG	Maximum Contaminant Level Goal: 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.
MCL	Maximum Contaminant Level: 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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances & Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	Maximum residual disinfection level goal. 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.
MRDL	Maximum residual disinfectant level. 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.
MNR	Monitored Not Regulated
MPL	State Assigned Maximum Permissible Level

Contaminants	MCLG or MRDLG	MCL, TT or MRDL	Detect in your water	Range Low	Range High	Sample Date	Violation	Typical Source
DISINFECTANTS & DISINFECTION BY-PRODUCTS (There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants)								
Chlorine (Cl ₂)	4	4	0.8	0.6	0.8	2022	NO	Water additive used to control microbes
Haloacetic Acids (HAA5) (ppb)	NA	60	27	2.15	31.3	2022	NO	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	NA	80	80.1	27.6	117	2022	NO	By-product of drinking water disinfection
INORGANIC CONTAMINANTS								
Barium (ppm)	2	2	0.036	0.036	0.036	2022	NO	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Fluoride (ppm)	4	4	0.33	0.33	0.33	2022	NO	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
MICROBIOLOGICAL CONTAMINANTS								
Turbidity (NTU)	NA	0.3	99	NA	NA	2022	NO	Soil Runoff
99% of the samples were below the TT value of 0.3. A value less than 95% constitutes a TT violation. The highest single measurement was 0.47. Any measurement in excess of 1 is a violation unless otherwise approved by the state.								
RADIOACTIVE CONTAMINANTS								
Alpha Emitters (pCi/L)	0	15	1.9	1.2	1.9	2021	No	Erosion of natural deposits
Radium (combined 226/228) (pCi/L)	0	5	0.27	0.27	0.27	2021	NO	Erosion of natural deposits
Uranium (ug/L)	0	30	1	1	1	2021	NO	Erosion of natural deposits

Contaminants	MCLG	AL	Your Water	Sample Date	# Samples Exceeding AL	Exceeds AL	Typical Source
INORGANIC CONTAMINANTS							
Copper—Action level at consumer taps (ppm)	1.3	1.3	0.036	2020	0	NO	Corrosion of household plumbing systems; Erosion of natural deposits
Lead—Action level at consumer taps (ppb)	0	15	1.6	2020	1	NO	Corrosion of household plumbing systems; Erosion of natural deposits

MONITORING AND REPORTING OF COMPLIANCE DATA VIOLATIONS

Our water system recently violated drinking water regulations. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we are doing to correct this situations.

LOW TOC REMOVAL

We monitor monthly for Total Organic Carbon (TOC) removal and maintain a running annual average (RAA) of the results. During the first quarter of 2022 the RAA for TOC removal was less than required.

What does this mean?

This TOC violation is not an emergency. If it had been you would have been notified immediately.

Total organic carbon has no health effects. However, TOC provides a medium for the formation of disinfection by-products. These by-products include trihalomethanes (THM's) and haloacetic acids (HAAs). Drinking water containing these by products in excess of the Maximum Contaminant Level (MCL) may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of cancer.

Tests taken during this time period did indicate the presence of disinfection by products in excess of their MCL's

What should I do?

You do not need to use an alternative (e.g., bottled) water supply. However, if you have a specific health concerns, please contact your health care professional.

What is being done?

We replaced the water heater, the brine pumps, the disinfection conversion unit and the water softener to increase the strength of the disinfectant to reduce disinfection by products.

We improved TOC removal at the treatment plant and resolved the TOC issue. TOC removal requirements have been met in the second third and fourth quarters of 2022 and so far in 2023.

The issue has been resolved

TURBIDITY ISSUE

We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. Water samples for March 2023 showed that turbidity measurements were over 1 turbidity unit on the 8th of March. The standard is that no samples may exceed 1 turbidity unit (NTU). This is a violation of the requirements of the Safe Drinking Water Act.

What does this mean?

This is not an emergency. If it had been, you would have been notified within 24 hours. ** Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. ** These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

What should I do?

There is nothing you need to do. You do not need to boil your water or take other actions. We do not know of any contamination, and none of our testing has shown disease-causing organisms in the drinking water.

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What is being done?

Currently the City of Las Vegas is in the process of replacing worn-out actuators and valves that control the backwash to waste water flow. In addition staff are in the process of relocating the turbidity analyzers and piping. City will be assessing the filter performance. These actions should minimize turbidity spikes.

The issue will be resolved within 90 days.

DISINFECTION REQUIREMENT

We are required to maintain a chlorine residual of at least 0.2 ppm entering the distribution system. Our disinfection requirement has not been met for the month of March 2023

What does this mean?

Chlorine levels in your water are important in ensuring safe water to all our customers. ** Chlorine is added to the water to inactivate bacteria that may be present. Lack of adequate disinfectant may cause the presence of disease causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. ** These symptoms are not caused only by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice.

Due to the Water Treatment Plant being shut off, the Chlorine feed pumps automatically shut off, upon re-establishing water flow through the Water Treatment Plant, we established Free Chlorine Residual above 0.2 ppm, the clear well was overflowed until the Free Chlorine Analyzer went above 0.2 ppm, however it was not drained. Furthermore, the Water Distribution System was not impacted, we have documentation that shows that the potable water in the distribution system had sufficient Free Chlorine Residuals throughout the system.

Tests taken during this time period **did not** indicate the presence of bacteria in the drinking water system during this period.

What should I do?

There is nothing you need to do. You do not need to boil your water or take other actions. We do not know of any contamination, and none of our testing has shown disease-causing organisms in the drinking water.

What is being done? Staff have strengthened procedures to ensure that water not meeting Safe Drinking Water Standards does not enter the distribution system .

This issue has been resolved

EXCEEDED DEADLINE TO SET UP COMPREHENSIVE PERFORMANCE EVAL

We were required to arrange for conducting a Comprehensive Performance Evaluation (CPE) within 30 days of a turbidity exceedance in an individual filter in the Montezuma Water Treatment Plant. We did not arrange for the CPE within the required deadline. This is a violation of the requirements of the Safe Drinking Water Act.

What does this mean?

This is not an emergency. If it had been, you would have been notified within 24 hours.

What should I do?

There is nothing you need to do. You **do not** need to boil your water or take other actions. This is an administrative violation and not directly related to water quality. We do not know of any contamination, and none of our testing has shown disease-causing organisms in the drinking water. General information is available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

What is being done? Over the last 30 days staff have found an engineer with the experience necessary for conducting a CPE. Staff are working with the engineer to develop the scope, fee and schedule for the CPE in accordance with **New Mexico Environment Department** requirements. The engineer is updating their task order to meet requirements and the city is securing the funds to complete this evaluation.

We anticipate resolving this violation by securing the arrangement for the CPE within 90 days

For more information, please contact:

Maria Gilvarry at Gilvarrym@lasvegasnm.gov

City of Las Vegas, NM3518025

905 12th Street

Las Vegas, NM 87701

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

SIGNIFICANT DEFICIENCIES

A routine sanitary survey conducted in 2021 by the New Mexico Environment Department Drinking Water Bureau found twenty significant deficiencies. Eleven of the deficiencies cited in the sanitary inspection were addressed and corrected in 2021. Seven of the deficiencies were addressed and corrected in 2022. Due to the Hermits Peak Calf Canyon Fire in 2022, the City of Las Vegas obtained an extension to complete the remaining two deficiencies. The City will complete the remaining deficiencies in 2023.

If you have a severely compromised immune system, have an infant, are pregnant, or are elderly, you may be at increased risk and should seek advice from your health care providers about drinking this water. General guidelines on ways to lessen the risk of infection by microbes are available from EPA’s Safe Drinking Water Hotline at 1-800-426-4791.

TIER	Required Distribution Time	Notification Delivery Method
<p>Tier 1 (Immediate Notice)</p>	<p>Any time a situation occurs where there is the potential for human health to be immediately impacted, water suppliers have 24 hours to notify people who may drink the water about the situation.</p>	<p>Water suppliers must use media outlets such as television, radio, and newspapers, post their notice in public places, personally deliver a notice to their customers, or an alternative method approved by the primacy agency.</p>
<p>Tier 2 (Notice as soon as possible)</p>	<p>Any time a water system provides water with levels of a contaminant that exceed EPA or state standards or that hasn't been treated properly, but that doesn't pose an immediate risk to human health, the water system must notify its customers as soon as possible, but within 30 days of the violation.</p>	<p>Notice may be provided via the media, posting, or through the mail.</p>
<p>Tier 3 (Annual Notice)</p>	<p>When water systems violate a drinking water standard that does not have a direct impact on human health (for example, failing to take a required sample on time) the water supplier has up to a year to provide a notice of this situation to its customers.</p>	<p>Tier 3 PN must be delivered the same way as Tier 2 PN. The extra time gives water suppliers the opportunity to consolidate these notices and send them with Annual Water Quality Reports (Consumer Confidence Reports).</p>



City of Las Vegas

Utility Service Department

905 12th Street

Las Vegas, NM 87701

(505) 454-3832

THANK YOU!

The City of Las Vegas Water Treatment Division would like to thank the community for their efforts to conserve our precious water resources

Maria Gilvarry, Utilities Director

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Monica Lorenzo, (SMA), Project Manager Assistant 2

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Jesus Hathaway, Operator Intermediate

Joshua Scoggin, Operator In Training

Faith Valencia, Operator In Training