

# 2023 Water Quality Report

## Big Bend Water District

### Additional Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Those with compromised immune systems such as those with cancer undergoing chemotherapy, persons who have had organ transplants, those with HIV/AIDS or other immune-system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice from their health-care providers about drinking water. EPA/Centers 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 at **800-426-4791**.

### Input and Information

For water-quality information, call **702-258-3215**.

Submit questions via the “Contact Us” form on **bigbendwaterdistrict.com** or by mail: Las Vegas Valley Water District, Water Quality Division, 1001 S. Valley View Blvd., Las Vegas, NV 89153. For the EPA Safe Drinking Water Hotline, call **800-426-4791**; for the Nevada Division of Environmental Protection’s Bureau of Safe Drinking Water, call **775-687-9521** or visit **ndep.nv.gov/water**.

Visit the Big Bend system pages on **bigbendwaterdistrict.com** for information on scheduled meetings of the Big Bend Water District Board of Trustees. Meetings are open to the public.

### Board of Trustees

The Big Bend Water District is governed by a seven-member Board of Trustees whose members also serve as the Board of Clark County Commissioners.

Michael Naft, Chair  
James Gibson, Vice Chair  
Justin Jones, Marilyn Kirkpatrick, William McCurdy II,  
Ross Miller, Tick Segerblom

John J. Entsminger, General Manager

### Noticia en Español

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Water delivered by the Big Bend Water District meets or surpasses all state of Nevada and federal drinking-water standards.

### About Your Source Water

All of the Big Bend Water District’s drinking water comes from the Colorado River. Virtually all of that water begins as snowmelt in the Rocky Mountains. Big Bend operates an intake in the Colorado River below Davis Dam. Potential sources of contamination for rivers include urban chemicals such as fertilizers and pesticides, industrial activities and wildlife. The presence of relatively little agriculture upstream along the Colorado River limits exposure to farming-related contaminants.

### Source Water Assessment

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 Big Bend Water District’s susceptibility to potential sources of contamination was initially provided by the state of Nevada. The summary of this source water assessment was first included in a Big Bend Water Quality Report and now may be accessed at **bigbendwaterdistrict.com**.

Call **702-258-3930** if you have questions. Learn more about the Nevada Source Water Assessment Program at **ndep.nv.gov/water/source-water-protection**.

### Treatment and Testing

The Big Bend Water District has an advanced water treatment facility designed to do one thing—provide drinking water that meets all Safe Drinking Water Act standards.

Water drawn from the Colorado River is sent to the Big Bend Water Treatment Facility. As it arrives, the water is treated with **ozone** to kill any potentially harmful microscopic organisms. A **multistage filtration system** then is used to remove particles from the water. Near the end of the treatment process, an **additional disinfectant** (sodium hypochlorite) is added to protect water on the way to customers’ taps. Additional corrosion-control efforts help maintain water quality through the water distribution system.

Every month, water samples from the Big Bend Water District’s water system are collected and analyzed. In fact, tests are performed even more frequently and extensively than the Safe Drinking Water Act requires.

The Big Bend Water District is operated by the Las Vegas Valley Water District (LVVWD)



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<b>Big Bend Water District Water Quality Test Results</b>				<b>BIG BEND WATER DISTRIBUTION SYSTEM <sup>(4)</sup></b>			<b>BIG BEND WATER TREATMENT FACILITY <sup>(4)</sup></b>			<b>These results represent levels in the treated water supply, based on 2022 data, except where noted.</b>
<b>REGULATED CONTAMINANTS</b>	<b>UNIT</b>	<b>MCL (EPA LIMIT)</b>	<b>MCLG (EPA GOAL)</b>	<b>MINIMUM</b>	<b>MAXIMUM</b>	<b>AVERAGE</b>	<b>MINIMUM</b>	<b>MAXIMUM</b>	<b>AVERAGE</b>	<b>POSSIBLE SOURCES</b>
<b>Alpha Particles</b>	pCi/L	15	0	Entry Point Monitoring Only			4	4	N/A	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
<b>Arsenic</b>	ppb	10	0	Entry Point Monitoring Only			1	2	1	Erosion of natural deposits
<b>Barium</b>	ppm	2	2	Entry Point Monitoring Only			0.1	0.1	0.1	Erosion of natural deposits; discharge from metal refineries; discharge of drilling wastes
<b>Bromate</b>	ppb	10	0	Entry Point Monitoring Only			2	7	5 <sup>(2)</sup>	By-product of drinking-water disinfection by ozone
<b>Copper <sup>(3)</sup></b>	ppm	1.3 <sup>(4)</sup> (Action Level)	1.3	N/D	1.1	0.6 (90th% value)	Distribution System Monitoring Only			Corrosion of household plumbing systems; erosion of natural deposits
<b>Fluoride</b>	ppm	4.0	4.0	Entry Point Monitoring Only			0.3	0.4	0.3	Erosion of natural deposits
<b>Free Chlorine Residual</b>	ppm	4.0 <sup>(5)</sup> (MRDL)	4.0 <sup>(5)</sup> (MRDLG)	0.08	1.4	0.7 <sup>(2)</sup>	Distribution System Monitoring Only			Water additive used to control microbes
<b>Haloacetic Acids</b>	ppb	60	N/A <sup>(6)</sup>	10	15	21 <sup>(7)</sup>	Distribution System Monitoring Only			By-product of drinking-water disinfection
<b>Lead <sup>(3)</sup></b>	ppb	15 <sup>(4)</sup> (Action Level)	0	0.3	5	2 (90th% value)	Distribution System Monitoring Only			Corrosion of household plumbing systems; erosion of natural deposits
<b>Nitrate (as Nitrogen)</b>	ppm	10	10	Entry Point Monitoring Only			0.3	0.5	0.4	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Selenium</b>	ppb	50	50	Entry Point Monitoring Only			2	3	2	Erosion of natural deposits; discharge from mines; component of petroleum
<b>Total Trihalomethanes</b>	ppb	80	N/A <sup>(6)</sup>	30	57	60 <sup>(7)</sup>	Distribution System Monitoring Only			By-product of drinking-water disinfection
<b>Turbidity</b>	NTU	95% of samples <0.3 NTU per month <sup>(8)</sup>	N/A	Treatment Facility Monitoring Only			100% of samples were below 0.3 NTU. Maximum NTU was 0.11 on Sept. 25, 2022.			Soil runoff
<b>Uranium</b>	ppb	30	0	Entry Point Monitoring Only			4	4	4	Erosion of natural deposits

### Understanding Test Results

The Las Vegas Valley Water District tests for more than 100 regulated and unregulated substances. As required by the Safe Drinking Water Act, the test results above for Big Bend list those regulated contaminants with primary standards that were detected. A complete analysis report is available through the Water District at [bigbendwaterdistrict.com](http://bigbendwaterdistrict.com).

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. For more information about contaminants and potential health effects, call the EPA Safe Drinking Water Hotline at **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, other contaminants, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source (untreated) water include:

- **Microbial contaminants** such as viruses and bacteria that may come from septic systems and wildlife;
- **Inorganic contaminants** such as salts and metals that can be naturally occurring or result from urban runoff, septic systems, industrial wastewater discharges and mining;
- **Pesticides and herbicides** that may come from a variety of sources such as urban runoff and residential uses;
- **Organic chemical contaminants** including synthetic or volatile organic chemicals that are by-products of industrial processes and can come from gas stations, urban runoff and septic systems;
- **Radioactive contaminants** that can be naturally occurring or the result of mining activities.

To ensure 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.

### Lead and Copper Education Notice

The Las Vegas Valley Water District, which operates the Big Bend Water District, actively monitors for lead and copper in accordance with state and EPA Lead and Copper Rule requirements. The following information is provided to help you assess risks in your tap water. If present at elevated levels, 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 Water District is responsible for providing high-quality drinking water up to your meter but cannot control the variety of materials used in home plumbing components. Homes built before 1986 are more likely to have lead-based 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 two 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 by a private laboratory.

### Footnotes

**(1)** Some Safe Drinking Water Act (SDWA) regulations require monitoring in the distribution system, while other SDWA regulations require monitoring at locations representative of the entry points to the distribution system. **(2)** This value is the highest running annual average reported in 2022. Reports are filed quarterly. **(3)** Samples are collected from Big Bend customers' taps. **(4)** Lead and copper are regulated by a Treatment Technique (TT) that requires systems to control the corrosiveness of their water. If more than 10% of tap-water samples exceed the Action Level, water systems must take additional steps. For copper the Action Level is 1.3 ppm, and for lead it is 15 ppb. **(5)** Chlorine is regulated by MRDL, with the goal stated as a MRDLG. **(6)** Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants. Trihalomethanes: bromodichloromethane (zero); bromoform (zero); dibromochloromethane (60 ppb); chloroform (70 ppb). Haloacetic acids: dichloroacetic acid (zero); trichloroacetic acid (20 ppb); monochloroacetic acid (70 ppb). Bromoacetic acid and dibromoacetic acid are regulated with this group but have no MCLGs. **(7)** This value is the highest locational running annual average reported in 2022. Reports are filed quarterly. **(8)** Turbidity is regulated by a Treatment Technique requirement: 95% of all samples taken after filtration each month must be less than 0.3 NTU. Maximum turbidity levels cannot exceed 1.0 NTU.

### Key Terms

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.  
**Disinfection by-product:** A substance created by the chemicals or processes used to destroy potentially harmful microorganisms.  
**Locational running annual average:** The average of sample results taken at a particular monitoring location for the previous four consecutive quarters  
**Maximum Contaminant Level (MCL):** 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.  
**Maximum Contaminant Level Goal (MCLG):** 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.  
**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 contamination.  
**N/A:** Not applicable  
**N/D:** Not detected. Does not equate to zero, but refers to an amount below analytical reporting limits.  
**Nephelometric Turbidity Unit (NTU):** A measurement of water's clarity.  
**Part per billion (ppb):** A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10 million.  
**Part per million (ppm):** A unit used to describe the levels of detected contaminants. Equivalent to 1 cent in \$10,000.  
**Picocuries per liter (pCi/L):** A measure of the radioactivity in water. Low levels of radiation occur naturally in many water systems, including the Colorado River.  
**Running annual average:** The average of sample results for 12 consecutive months or four consecutive quarters, based on the monitoring requirements.  
**Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.  
**Turbidity:** A measure of water clarity, which serves as an indicator of the treatment facility's performance.

For more information, call the EPA Safe Drinking Water Hotline, **800-426-4791**, or visit [epa.gov](http://epa.gov).

In December 2021, the U.S. EPA took a series of actions to improve the Lead and Copper Rule that are intended to better protect families and communities in years to come, particularly those that have been disproportionately impacted by lead in drinking water. Learn more about focus areas, including additional tap sampling and lead service line replacements, at [epa.gov](http://epa.gov), and depend on your Water Quality Report to keep you informed.