2024 Annual Drinking Water Quality Report Big Bend Water Authority

PWS: 2621102

We're pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is two groundwater wells that draw from the Floridan aquifer. One well draws from a depth of 400 feet, the other well's depth is unknown. We chlorinate your water for disinfection purposes, treat with hydrogen peroxide for organics removal, filter with sand and granular activated carbon (GAC) for iron and suspended solids removal, treat with polyphosphate for iron control, treat with diluted sulfuric acid for pH control, and aerate for volatile organic contaminant removal/odor control.

In 2024, the Florida Department of Environmental Protection (DEP) conducted a Source Water Assessment on our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. There are five potential sources of contamination identified for this system with low susceptibility levels. The assessment results are available on the DEP Source Water Assessment and Protection Program (SWAPP) website at https://prodapps.dep.state.fl.us/swapp/.

If you have any questions about this report or concerning your water utility, please contact Garrett Dodd at (352) 498-3576. We encourage our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings held on the first Thursday of each month, 5:00pm, at the Big Bend Water Authority Treatment Plant, 1313 1st Ave N, Steinhatchee, FL 32359.

Big Bend Water Authority routinely monitors for contaminants in your drinking water according to federal and state laws, rules, and regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1, to December 31, 2024. Data obtained before January 1, 2024, and presented in this report are from the most recent testing done in accordance with the laws, rules, and regulations.

In the table below, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

<u>Maximum Contaminant Level or MCL</u>: 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.

<u>Maximum Contaminant Level Goal or MCLG</u>: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow/or a margin of safety.

<u>Action Level (AL)</u>: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

<u>Locational Running Annual Average (LRAA)</u>: The average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

<u>Maximum Residual Disinfectant Level or MRDL</u>: 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. <u>Maximum Residual Disinfectant Level Goal or MRDLG</u>: 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.

ND: Not detected; indicates that the substance was not found by laboratory analysis.

<u>Parts per million (ppm) or milligrams per liter (mg/L)</u>: One part by weight of analyte to 1 million parts by weight of the water sample.

<u>Parts per billion (ppb) or micrograms per liter ($\mu g/L$)</u>: One part by weight of analyte to 1 billion parts by weight of the water sample.

Picocurie per liter (pCi/L): Measure of the radioactivity in water.

2024 CONTAMINANTS TABLE

Radioactive Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Radium 226 + 228 or Combined Radium (pCi/L)	Mar-21	N	3.1	N/A	0	5	Erosion of natural deposits

During 2024, Big Bend Water Authority was required to monitor for Radium 226 + 228 or Combined Radium due to a detection > ½ MCL during 2021. These samples were not collected.

Inorganic Contaminants

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	Sept-24	Ŋ	0.0017	N/A	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb)	Sept-24	N	1.2	N/A	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	Sept-24	N	0.39	N/A	4	4.0	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at the optimum level of 0.7 ppm
Sodium (ppm)	Sept-24	N	17	N/A	N/A	160 .	Saltwater intrusion, leaching from soil
Nitrate (as Nitrogen) (ppm)	Sept-24	N	0.31	0.3-0.31	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nickel (ppb)	Sept-24	Ň	1.9	N/A	N/A	100	Pollution from mining and refining operations. Natural occurrence in soil

During 2024, Big Bend Water Authority was required to monitor for Volatile Organic Contaminants. These samples are required to be collected on a triennial basis. Sample results were not submitted.

Stage 1 Disinfectants

Disinfectant and Unit of Measurement	Dates of sampling (mo/yr)	MRDL Violation Y/N	Level Detected	Range of Results	MRDLG	MRDL	Likely Source of Contamination
Chlorine (ppm)	Monthly 2024	N	1.86	1.4-2.3	MRDLG = 4	MRDL = 4	Water additive used to control microbes

Stage 2 Disinfection By-Products

Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	MCL Violation (Y/N)	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	Quarterly 2024	N	24.1*	16.7-28.5	N/A	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	Quarterly 2024	N	72.03*	59-94.2	N/A	80	By-product of drinking water disinfection

*For HAA5s and TTHMs, "Level Detected" is the highest LRAA that occurred in 2024, computed quarterly. "Range of Results" is the range of all individual samples collected from all sampling locations in 2024.

Lead and Copper (Tap Water)

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Contaminant and Unit of Measurement	Dates of sampling (mo/yr)	AL Exceeded (Y/N)	90 th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL (Action Level)	Likely Source of Contamination			
Copper (tap water) (ppm)	Aug/Sep-22	N	0.033	0 of 10	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formulafed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Big Bend Water Authority is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Garrett Dodd at (352) 498-3576. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at https://www.epa.gov/safewater/lead,

We are required to periodically sample water from customer taps to determine lead and copper levels. EPA sets the lead action level at 15 ppb. For a water system to be in compliance, at least 90% of tap water samples must have lead levels below this limit. This report contains the 90th percentile and range of our most recent sampling. The individual results for each location sampled are available for review by contacting Garrett Dodd at (352) 498-3576.

To address lead in drinking water, EPA requires that all community water systems develop and maintain an inventory of service line materials. We have completed a service line inventory, and it is available for review by contacting Garrett Dodd at (352) 498-3576.

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 byproducts 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.

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 U.S. 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.

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. U.S. Environmental Protection Agency/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

We at Big Bend Water Authority work around the clock to provide top quality water to every tap. 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.

We would like you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. If you have any questions or concerns about the information provided, please feel free to call any of the numbers listed.